

# The nomenclature of Eduard Rüppell's birds from north-east Africa

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Although explored by the Egyptians, Romans and Portuguese, Abyssinia was scientifically more or less unknown at the dawn of the 19th century. Early travellers were more fascinated by the region's culture than its natural history, with some exceptions (cf. Foster 1949). A collection-based survey combined with first-hand field notes on the avifauna of what was then named Abyssinia was not undertaken until the German Wilhelm Peter Eduard Simon Rüppell (1794–1884) left Frankfurt am Main for Arabia and North Africa in 1822. When he returned to Frankfurt in 1834, Rüppell had amassed a very large collection of vertebrates from the Abyssinian region, which formed the basis for his well-known contribution to the ornithology of Abyssinia (Cretzschmar 1826–30, Carus 1872, Hartert 1891, Sharpe 1906, Mertens 1949, Steinbacher 1949, Stresemann 1951, Gebhardt 1964, Mearns & Mearns 1998, Schmidt & Hackethal 2000, Steinheimer 2003, Walters 2003).

## History of Rüppell's explorations in north-east Africa

The first birds from north-east Africa were reported by a Swede named Pehr Forsskål (1736–63; Fors[s]kål & Niebuhr 1775, Sclater 1929). However, any information on Abyssinia available at the end of the 18th century derived principally from a book, *Travels to discover the source of the Nile*, by the Scot James Bruce of Kinnaird (1730–94), who travelled Abyssinia in 1768–73 (Bruce 1790). The ornithological exploration of north-east Africa only commenced in 1805, when the Englishman Henry Salt (1780–1827) reached the Abyssinian highlands during expeditions in 1805–06 and 1809–10 (Salt 1814, Largen 1988). Salt's ornithological collections were subsequently obtained and studied by Lord Stanley (1775–1851), later to become the 13th Earl of Derby, who named several new species of Abyssinian birds (Stanley 1814). Thereafter, John Latham (1740–1837) continued investigating Salt's material (Latham 1821–24). Next to explore Nubia and Abyssinia were the Prussians Wilhelm Friedrich Hemprich (1796–1825) and Christian Gottfried Ehrenberg (1795–1876) in 1820–26, who enriched the collection of Berlin Museum by 4,671 specimens of 429 bird species (Humboldt 1826, Hemprich & Ehrenberg 1828, Stresemann 1954, Gebhardt 1964, Klausewitz 2002, 2003). Unfortunately, due to Hemprich's early death, the published ornithological results were rather incomplete (Hemprich & Ehrenberg 1828, 1829, 1833, Stresemann 1954). Simultaneously, Frédéric Caillaud (1787–1869) explored the province of Sennar, although his travels are better known to entomologists, malacologists and botanists, rather than to ornithologists, due to his focus (Caillaud 1826–27).

Rüppell visited Arabia and North Africa four times, first in 1817, when his professional connections as a volunteer for a trading company, based in the Italian city of Livorno, enabled him to explore Egypt. Rüppell was at that time mainly interested in archaeology (no bird specimens were collected), but he did join the naturalist Henry Salt for a spell. During this first encounter with Africa, Rüppell made the decision to return and explore north-east Africa scientifically. During the second trip, the first bird collecting trip, in 1822–27, he travelled the Sinai Peninsula, Egypt, Nubia, Kordofan, around the Nile estuary and along the coast of the Red Sea south to Massawa. The third journey, in 1831–34, brought him back to the Sinai Peninsula, Egypt, and along the coast of the Red Sea to Massawa, but Rüppell also advanced into the highlands of Ethiopia as far south as Lake Tana. A fourth voyage to Egypt in 1849–50 procured only a few bird specimens. Of importance to the history and especially the type status of some of Rüppell's specimens is that, whilst he twice collected birds in the Sinai Peninsula, Egypt and along the coast of the Red Sea to Massawa, he only once collected in Nubia and the Kordofan (second trip, first collecting expedition) and the Ethiopian highlands (third trip, second collecting expedition). Specimens from the Red Sea, for instance, cannot certainly be linked to one or the other trip if these data are missing, as Rüppell obtained birds on the coast of the Red Sea during both the second trip (in 1822, 1826–27) and on the third visit (1831–32) (Rüppell 1834). Obviously, not all the specimens were collected by Rüppell himself, but by the local hunters he employed and Rüppell's own servants. On his first collecting expedition Rüppell was accompanied by the young surgeon Michael Hey (in Rüppell's service from 1822, born in Rüdesheim, died at Cairo in 1832), the Dutch hunter Franz Lamprecht (from 1823; the hunter Leonhard Geis was sent home prior to the start of the expedition in 1822), by a Matthias Lindemann and by the Prussian soldier Friedrich Dienst (worked for Rüppell in 1826). In 1825, two former members of Ehrenberg & Hemprich's expeditions joined Rüppell's party: the Italian painter Finzi (with Rüppell in 1825–26) and the Moravian hunter and taxidermist Martin Bretzka (from 1825; fl. 1820–42). Hey and Bretzka returned to and stayed in the region, Bretzka also collecting birds. When Rüppell revisited Africa during his second collecting expedition, i.e. his third African trip, in late-December 1830, he had a new personal servant with him: Theodor Erckel. Baron Friedrich Heinrich von Kittlitz (1799–1874), who hoped to join Rüppell's expedition, was forced to return to Europe in spring 1831 due to illness (Niethammer 1971). Rüppell filled the vacancy with Matthias Lindemann again.

Those birds in Rüppell's collection from north-east Africa obtained post-1833 in the province of Shoa were collected by Bretzka. Rüppell acquired and subsequently donated Bretzka's birds to the Senckenberg Museum at Frankfurt in 1841 (Rüppell 1845, Hartert 1891). Others of Bretzka's bird specimens were sold to the British Museum,<sup>1</sup> London (BMNH archives: DF200/145/10).

<sup>1</sup> Zoology Department, British Museum; later British Museum of Natural History, today's Natural History Museum, London/Tring (BMNH).

However, not all birds assigned to Rüppell were collected by him or for him. Some have totally different origins: Steinheimer (2002) referred to a specimen of *Pteroptochos megapodus* from Chile, which, although the label bears the name Rüppell, was collected by Friedrich Heinrich von Kittlitz in spring 1827 during the circumnavigation of the Russian ship *Senjawin*. Others are from Africa, but from localities that Rüppell and his collectors never visited. A male *Foudia madagascariensis* (ZMB 7272) in the collection of the Berlin Museum, which must be from Madagascar, carries a label bearing 'Abyssinia Rüppell', although it could not have been collected by Rüppell. The same is true of a *Coracopsis nigra* (ZMB 26623), also from Madagascar. It seems probable that Rüppell did not only acquire Abyssinian birds, but purchased additional species in local markets along the Red Sea coast.

Rüppell also worked on birds in other collections, naming new taxa on the basis of other people's material. For his *Systematische Uebersicht der Vögel Nord-Ost-Afrika's* (Rüppell 1845) he consulted specimens procured on Sir William Cornwallis Harris' (1807–48) trip to Abyssinia in 1842,<sup>2</sup> and raptors from the collection made by Paul Wilhelm von Württemberg (1797–1860) on his voyage to Sennar in 1839–40. These specimens are now at BMNH and the Staatliches Museum für Naturkunde, Stuttgart (Horsfield & Moore 1854, Sharpe 1906, Roselaar 2003).

Whilst Bruce (1790) and Salt (1814) depicted Abyssinia as being out of reach for any traveller due to warfare and frequent humiliations, Rüppell (1838/1840) encouraged Europeans to explore the region scientifically. Apparently the religious fanaticism had declined over the years. Consequently Rüppell was followed in his Abyssinian and north-east African explorations by Johan Hedenborg (1787–1865) in 1835 and 1837–39 (Sundevall 1850, Lönnberg 1926, Horn *et al.* 1990), Paul Wilhelm von Württemberg (1797–1860) in 1839–40 (Gebhardt 1964), Pierre Victor Adolphe Ferret (1814–82) and Joseph Germain Galinier (1814–88) in 1839–43 (Ferret *et al.* 1847–50, Guérin-Méneville 1843), Charlemagne Théophile Lefebvre (1811–60) in 1839–43 and 1847–54 (Lefebvre 1845–51, Didot & Hoefer 1859), Richard Vierthaler (1820–52) in 1847–52 (Vierthaler 1852, Gebhardt 1964), Alfred Edmund Brehm (1829–84) in 1847–51 and 1862 (A. E. Brehm 1855b, 1863), John Petherick (1813–82) in 1848–59 (Petherick 1861, Petherick & Petherick 1869), Theodor von Heuglin (1824–76) between 1852 and 1875 (Heuglin 1856, 1869a,b, 1871, 1873), Adalbert Johann Baptist Freiherr von Barnim (1841–60) and Carl Eduard Wilhelm Robert Hartmann (1832–93) in 1859–60 (Schweinfurth 1862, Hartmann 1863, 1864, Gebhardt 1970), William Jesse (*fl.* 1860s–1874) and William Thomas Blanford (1833–1905) in 1868 (Blanford 1868, Jesse 1869, Finsch 1870, Godwin-Austen 1905, Sharpe 1906), Emin Pasha alias Eduard Schnitz(l)er

<sup>2</sup> BMNH obtained 54 of Harris' Shoa specimens from the East India Company Museum in 1845. Harris gave a vivid narrative account of his travels, but focused more on big game, native people, battles and regional Christians than the Abyssinian avifauna (Harris 1844).

(1840–92) from c.1875 until 1892 (Gebhardt 1964), Orazio Antinori (1811–82) in 1859–61 and 1878–82 (Antinori 1864, Hartmann 1865, Violani & Barbagli 2003), Vincenzo Ragazzi (1856–1929) in 1884–86 (Violani & Barbagli 2003), Vittorio Bottego (1860–97) in 1895–97 (Violani & Barbagli 2003), Carlo Freiherr von Erlanger (1872–1904) in 1899–1901 (Erlanger 1904b), Gustav Schrader (1852–1942) in 1899–1903, Oscar Neumann (1867–1946) in 1900–01 (Neumann 1902, 1903, 1904, 1905, 1906, 1928) and Otto Graf von Zedlitz & Trützschler (1873–1927) in 1908–09 (Zedlitz 1910), to name but a few.<sup>3</sup>

## Rüppell's and Cretzschmar's ornithological publications

Rüppell published two major works on the ornithology of Abyssinia, *Neue Wirbelthiere zu der Fauna von Abyssinien gehörig—Vögel* (Rüppell 1835, 1836, 1837a, 1840), and *Systematische Uebersicht der Vögel Nord-Ost-Afrika's* (Rüppell 1845), as well as several papers mainly in the journal *Museum Senckenbergianum* (Rüppell 1837b–d, 1839, 1842a,b). Whilst Rüppell was occupied on his second voyage, his colleague and head curator of the Senckenberg Museum, Philipp Jakob Cretzschmar (1786–1845), produced the work *Atlas zu der Reise im nördlichen Afrika von Eduard Rüppell—Vögel* (Cretzschmar 1826, 1827, 1828, 1829, 1830), describing 30 bird species new to science. I follow Steinbacher (1949) and Sawyer (1952) for publishing years of the original descriptions, which differ slightly to Zimmer (1926), Peters *et al.* (1934–87) and Dickinson (2003). At the Senckenberg Museum of Frankfurt I have personally checked the wrappers of Cretzschmar's work, issues five, seven, eight and fourteen (1827, 1828, 1828, 1829) as well as following wrappers of Rüppell: 1835: nos. 1–4 of the bird descriptions: pls. 1 (*Buceros cristatus*) to 6 (*Perdix Erckelii*); 1836: nos. 5–8 of the bird descriptions: pls. 7 (*Otis melanogaster*) to 12 (*Oriolus moloxita* and *Prionops cristatus*); and 1840: main chapters and introduction, nos. 23–29 of the bird descriptions: pls. 31 (*Cinnyris affinis*, *C. gularis* and *C. Tacazze*) to 42 (*Currucia cinnamomea* and *Currucia lugens*).<sup>4</sup> No discrepancies to Steinbacher (1949)<sup>5</sup> and Sawyer (1952) have been unveiled.

Some of Rüppell's bird specimens were immediately disposed of after their arrival in Frankfurt, and specimens are found today in many institutions such as the Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt (SMF), The Natural

<sup>3</sup> I have only listed those explorers who collected birds. Many other scientists of the 19th century not listed above went along the Nile, to Sudan and Eritrea.

<sup>4</sup> Plates 31–42 from the 1840 issue consistently lack the note 'Auf Stein gez. v. F. C. Vogel / Gedruckt bei P. C. Stern', shown similarly on all plates of the 1835–1837 issues, except for plates 16, 17 and 20.

<sup>5</sup> However, Steinbacher (1949) later included some errors on publication dates in the type list: *Motacilla longicauda* Rüppell, 1840 instead of 1837; *Ixos leucopygius* Rüppell, 1840, instead of 1837; *Hirundo pristoptera* Rüppell, 1836 instead of 1840; *Corvus affinis* Rüppell, 1835, instead of 1836; *Oriolus moloxita* Rüppell, 1835, instead of 1836; *Cinnyris gularis* Rüppell, 1837, instead of 1840; *Cinnyris affinis* Rüppell, 1837, instead of 1840; *Emberiza septemstriata* Rüppell, 1840, instead of 1837; and *Euplectes abyssinicus* Rüppell, 1835, instead of 1840.

History Museum, Tring (BMNH), Museum für Naturkunde, Berlin (ZMB), Naturalis—Nationaal Natuurhistorisch Museum, Leiden (RMNH), Museo Regionale di Scienze Naturali, Torino (MRSN) and Naturhistorisches Museum, Vienna (NMW). Whilst most museums just acquired Rüppell's avian specimens without working on the material, Coenraad Jacob Temminck (1778–1858), then the director of Leiden Museum, used Rüppell's birds and manuscript names in his own forthcoming publications entitled *Planches coloriées* (Temminck & Laugier 1820–39), thus securing priority of authorship for several new taxa discovered by Rüppell.<sup>6</sup>

This paper discusses these and other nomenclatural issues concerning bird species collected by Rüppell and described by him and by Cretzschmar (see Appendix for a complete list of nomenclaturally valid bird names of Rüppell and Cretzschmar according to the current paper).

## Nomenclature

Several points made below draw upon rules or articles laid down in *The international code of zoological nomenclature* (ICZN 1999) (hereafter 'the Code'). The first edition of the code appeared in 1961 (ICZN 1961), and it is important to note that although various initiatives leading towards an international code were made during the second half of the 19th century (cf. e.g. Hartert 1891: XVI–XVIII) no Code was formally agreed. It remains necessary when reviewing old decisions against the new Code to realise that no such guidance was available when Cretzschmar and Rüppell were working.

*Ardea Goliath* Cretzschmar, 1829: 39, pl. 26<sup>7</sup> *nomen protectum*  
= *Ardea goliat* Temminck, 1829b: livr. 80, pl. 474 *nomen oblitum*<sup>8</sup>  
= *Ardea goliath* Cretzschmar, 1829

Dickinson (2001) listed the dates of each of the 102 issues of Temminck & Laugier's (1820–39) *Planches coloriées*. Steinbacher (1949) did likewise for Cretzschmar's *Atlas zu der Reise im nördlichen Afrika* (1826–30). Comparing the two, one can restart the debate on the first authorship between Temminck, Rüppell

<sup>6</sup> Temminck used Rüppell specimens for the following original descriptions: *Vultur aegyptius* Temminck, 1826; *Falco concolor* Temminck, 1825; *Larus leucophthalmus* Temminck, 1825; *Caprimulgus isabellinus* Temminck, 1825; *Caprimulgus eximius* Temminck, 1826; *Alauda bifasciata* Temminck, 1826; *Alauda isabellina* Temminck, 1823; *Alauda bilopha* Temminck, 1823; *Saxicola monacha* Temminck, 1825; *Saxicola melanura* Temminck, 1824; *Saxicola deserti* Temminck, 1825; *Saxicola isabellina* Temminck, 1829a (see below).

<sup>7</sup> Sharpe (1898: 66), followed by Sclater (1924: 24) and Steinbacher (1949: 103), cited the wrong plate number, 36, most likely a typographic error for 26 (A. Peterson *in litt.* July 2004).

<sup>8</sup> The specimen upon which Temminck based his description was not collected by Rüppell. Temminck, however, did include a cross-reference to Cretzschmar's description.

and Cretzschmar. However, only three cases might demand nomenclatural changes: *Ardea goliat* Temminck, 1829b, versus *Ardea goliath* Cretzschmar, 1829, *Saxicola isabellina* Cretzschmar, 1830, and *Malurus clamans* Cretzschmar, 1826 (see below).

The original description of Temminck's *Ardea goliat* is found in the livraison 80 and can thus be dated 5 September 1829 (Dickinson 2001). Some 19th-century authors referred to Temminck's authorship of the taxon (*goliath* 'Temm.': Hartlaub 1852: 40; Layard 1867: 305; Layard & Sharpe 1875–84: 707). Cretzschmar's description, which used the same name, was also published in 1829, but cannot be fixed to an accurate date. In such cases, ICZN (1999 article 21.3.2) requires adopting the publication date 31 December, in this case 31 December 1829. Nevertheless, most early authors cited Cretzschmar as author (*i.a.* Hemprich & Ehrenberg 1833: m, Heuglin 1873: 1048, Bocage 1877–81: 437, Sjöstedt 1895: 15, Sharpe 1898: 66).

It also does not assist matters that Temminck (1829b) already referred to Cretzschmar's description and plate when writing '*Une figure de cette espèce, prise d'un individu revêtu de la livrée intermédiaire entre le jeune âge et l'état adulte, sera publiée dans l'Atlas du Voyage de M. Ruppel [sic.]*' Temminck could just have heard about Cretzschmar's project (E. Dickinson pers. comm. 2004). However, the senior synonym<sup>9</sup> *Ardea goliat* Temminck, 1829b, has not been used as a valid name since 1899 (Reichenow 1900–01: 376, Neumann 1904: 339, Erlanger 1905: 106, Stark & Sclater 1906: 55, Reichenow 1911: 252, Hartert 1920: 1234, Berlioz & Berlioz 1923: 9, Roberts 1924: 137, Friedmann 1930: 18, Archer & Godman 1937: 45, Lippens 1938: 19, Malbrant & Maclatchy 1949: 94, Steinbacher 1949: 103; see below), fulfilling article 23.9.1 of the Code (ICZN 1999). In contrast, the junior synonym *Ardea goliath* Cretzschmar, 1829, has been in prevailing usage as the taxon's presumed valid name in more than 25 works published by more than ten authors in 1954–2004 (Cave & Macdonald 1955: 56, Smithers *et al.* 1957: 25, MacDonald & Hall 1957: 5, Mackworth-Praed & Grant 1957: 40, Schouteden 1961: 13, 1962a: 11, 1962b: 12, 1963: 18 [select], Clancey 1964: 30, Vaurie 1965: 75, McLachlan & Liversidge 1970: 28, Wolters 1976: 92, Cramp *et al.* 1977: 318, Payne 1979: 202, Brown *et al.* 1982: 167, Rosa Pinto 1983: 28, Soothill & Soothill 1989: 20, Sibley & Monroe 1990: 304, Martínez-Vilalta & Motis 1992: 407, Dickinson 2003: 87),<sup>10</sup> therefore fulfilling article 23.9.2 of the Code (ICZN 1999).

<sup>9</sup> Fixed as such by the Code (ICZN 1999 article 21.3.2).

<sup>10</sup> Only those references are given above that cite Cretzschmar as author. The Zoological Records for 1978–2003 show 38 entries for *Ardea goliath* (Cretzschmar's spelling) and none for *Ardea goliat* (Temminck's spelling): Mahdy, O. A. & Shaheed, I. B. (2001) Histopathological study on the effect of *Renicola heroni* on the kidneys of giant heron *Ardea goliath*. *Helminthologia (Bratislava)* 38: 81–83; Kasoma, P. M. B. (2000) Diurnal activity patterns of three heron species in Queen Elizabeth National Park, Uganda. *Ostrich* 71: 127–130; Salewski, V. & Grafe, T. U. (1999) New tape recordings of three West African birds. *Malimbus* 21: 117–121; Kaiser, M. & Richter, R. (1998) Hand rearing of the Goliath Heron *Ardea goliath* in Berlin-Friedrichsfelde Zoo. *Milu* 9: 384–393; Grummt, W. (1996) Further successful breeding of the Goliath Heron (*Ardea goliath*) in Berlin-Friedrichsfelde Zoo. *Milu* 8:

Herewith this paper states explicitly, in the interest of nomenclatural stability, that the younger name *Ardea goliath* Cretzschmar, 1829 (*nomen protectum*), is valid; the action has been taken in accordance with the conditions of articles 23.9.1.1 and 23.9.1.2 (ICZN 1999). The older name *Ardea goliat* Temminck, 1829b (*nomen oblitum*), is henceforth invalid. The Frankfurt Museum holds the lectotype (SMF 12598) and two paralectotypes (SMF 18811, 18812) of *Ardea Goliath* Cretzschmar, 1829.

*Ibis comata* '(Hemprich)' Rüppell, 1837a: 49 *nomen nudum*  
 = *Geronticus comatus* 'Licht.' Gray, 1844: 90 *nomen nudum*  
 = *Geronticus comatus* 'Ehrenberg' Rüppell, 1845: 122, pl. 45

- 706–713; Kopij, G. (1996) A mixed herony at Willem Pretorius Game Reserve, Free State Province. *Mirafra* 13: 63–67; Kasoma, P. M. B. (1995) Kleptoparasitic attacks on three heron species (Ardeidae) in Queen Elizabeth National Park, Uganda. *Afr. J. Ecol.* 33: 291–293; Madge, S. (1995) A record of Goliath Heron in Assam. *Bull. Oriental Bird Cl.* 21: 47; Grummt, W. (1993) Erfolgreiche Brut des Riesenreihers (*Ardea goliath*) im Tierpark Berlin-Friedrichsfelde. *Zool. Garten* 63: 303–313; Falzone, C. K. (1989) Breeding Goliath Heron, *Ardea goliath* at the Dallas Zoo. *Aazpa Regional Conf. Proc.* 1989: 741–746; Abbott, T. (1994) A Goliath Heron at Ndumo. *Albatross* 317: 32–33; Tyler, D. & Hahndick, Q. (1993) Goliath Heron in battle. *Promerops* 209: 10; Schels, C. (1993) The second breeding record of the Goliath Heron *Ardea goliath* in Somalia. *Scopus* 17: 59–60; Mahdy, O. A. (1993) On three trematod species infesting the giant heron (*Ardea goliath*) in Giza, Egypt. *J. Egypt. Vet. Med. Assoc.* 53: 305–312; Harris D., Harris, J. & Harris, C. (1993) More Goliath Herons at Chelmsford Dam (Newcastle). *Albatross (Durban)* 316: 5; Euston-Brown, M. (1993) Orange River birds. *Promerops* 209: 11; Davis, S. & Cowgill, R. (1993) Goliath Heron in Natal. *Albatross* 315: 15; Brooke, R. K. (1993) An inland breeding record of the Goliath Heron in Natal. *Albatross* 314: 27; Pauw, R. (1991) Goliath Heron. *Promerops* 199: 16; Blerk, E. van & McFarlane, J. (1990) Goliath Heron in the Little Karoo. *Promerops* 192: 9; Lamont, G. & Myburgh, N. (1990) Records from the Brandvlei-Calvinia area. *Promerops* 194: 7–9; Saikia, P. & Bhattacharjee, P. C. (1990) The present status of waders and other water birds of Brahmaputra Valley, Assam (India). *Stilt* 17: 65–70; Ralph, I. (1990) Goliath Heron eating a large barbel. *WBC News* 150: 8–9; Gold, B. E. (1989) Diet. *WBC News* 147: 6; Dean, W. R. J. (1988) Breeding of the Goliath Heron at Barberspan, Transvaal. *Ostrich* 59: 75–76; Hustler, K. & Games, I. (1987) Goliath Herons feeding at night. *Honeyguide* 33: 58; Kinzelbach, R. K. (1986) New records of Goliath Heron, Yellow-billed Stork, Blyth's Reed Warbler and Clamorous Reed Warbler in the Middle East. *Orn. Soc. Middle East Bull.* 17: 13–17; Geldenhuys, J. N. (1984) Status of the Fish Eagle and Goliath Heron in the Orange Free State, South Africa. Pp. 577–587 in Ledger, J. (ed.) *Proc. Fifth Pan-Afr. Orn. Congr.* Southern African Orn. Soc., Johannesburg; Ferguson, D. A. (1984) Ornithological observation in the Hurghada area April 22–May 5, 1982. *Courser* 1: 8–16; Fraser, W. (1984) Strange death of heron. *Bokmakierie* 36: 23; Bijlsma, R. G. & Roder, F. E. de (1982) Goliath Herons in Egypt in 1981. *Dutch Birding* 4: 82–84; Skead, D. M. (1981) Goliath Heron chokes on carp. *Bokmakierie* 33: 51; Guggisberg, C. A. W. (1981) [Africa's heron.]. *Artis* 26: 212–214; Mock, D. W. & Mock, K. C. (1980) Feeding behavior and ecology of the Goliath Heron. *Auk* 97: 433–448; El-Naffar, M. K., Khalifa, R. M. & Sakla, A. A. (1980) Parasitofauna of the Egyptian aquatic birds. 2. Trematode parasites of the giant heron (*Ardea goliath*) in Assiut Governorate. *J. Egypt. Soc. Parasitology* 10: 107–116; Whitfield, A. K. & Blaber, S. J. M. (1979) Feeding ecology of piscivorous birds at Lake St Lucia, part 2: wading birds. *Ostrich* 50: 1–9; Stein, H. (1978) [Goliath Heron in the Netherlands]. *Vogeljaar* 26: 208; Hagen, H. (1978) Leukismus bei einem Nacktkehlfrankolin (*Francolinus ater*) und einem Goliathreiher (*Ardea goliath*). *Orn. Mitt.* 30: 40–44.

= *Ibis comata* Hemprich & Ehrenberg MS (*fide* Rüppell, 1837a, 1845)

= *Ibis Hemprichii* Ehrenberg, 1833: pl. 18

= *Geronticus eremita* (Linnaeus, 1758)

This name had long been attributed to Ehrenberg's authorship (Sharpe 1898: 16), probably on the grounds that birds of this species in the Berlin Museum had been labelled with the MS name *Ibis comata*. However, Ehrenberg (1833: pl. 18),<sup>11</sup> when publishing on the Bald Ibis, finally named the taxon *Ibis Hemprichii* in honour of his early-deceased friend Wilhelm Friedrich Hemprich. Rüppell (1837a: 49) listed '*Ibis comata* (Hemprich)' without any proper description, thus introducing a *nomen nudum*. Gray (1844: 90) followed in the use of the *nomen nudum* in his *List of the specimens of birds in the collection of the British Museum—Part 3 Gallinae, Grallae, and Anseres*. However, one year later, Rüppell (1845: 122, pl. 45) validated the name by publishing it in combination with a coloured plate and reference to Ehrenberg.

The birds seen by both Ehrenberg and Rüppell, belonged to the eastern population of the Bald Ibis, which is on the verge of extinction (BirdLife International 2000). The birds wintered in eastern Sudan, Ethiopia, Eritrea and southern Arabia (Steinbacher 1979).

***Falco (Nisus) polyzonus* Rüppell, 1836:** 36(–37), pl. 15, fig. 1 & 2 *nomen oblitum*, nec *Nisus polyzonus* Lesson, 1830: 58

= *Melierax polyzonus* 'Rüpp.' *apud* Rüppell, 1845: 12

= *Nisus polyzonus* Ferret & Galinier, 1850: 179 (*fide* Sharpe 1874: no substitute name)

= *Melierax metabates* Heuglin, 1861b: 72

= *Melierax metabates metabates* Heuglin, 1861b *nomen protectum*

Some of the confusion surrounding this name results from Rüppell's inconsistency in his introduction of subgeneric names (Rüppell 1835, 1836, 1837a, 1840). Whilst Rüppell (1836) placed the subgenus name in parentheses when describing *Falco (Aquila) albicans*, he subsequently (Rüppell 1836) reversed the hierarchy in *Prionops (Lanius) cristatus* (cf. Mayr & Greenway 1960: 311). Furthermore, Stresemann & Amadon (1979: 322) treated *Falco (Nisus) polyzonus* Rüppell, 1836: 36 as preoccupied by *Nisus polyzonus* Lesson, 1830: 58,<sup>12</sup> whilst *Falco (Aquila)*

<sup>11</sup> A set of plates 11–20, now in private hands, originally came in a wrapper dated 1829 (R. J. Dowsett & E. C. Dickinson pers. comm. 2003).

<sup>12</sup> Stresemann & Amadon (1979: 322) consequently used the younger synonym, which is *Melierax metabates* Heuglin, 1861b: 72, for their contribution to Peters' checklist (Mayr & Cottrell 1979). Mathews (1911: 14) dated the first livraison (pp. 1–80) of Lesson's (1830–31) *Traité d'Ornithologie* as published in February 1830.

*albicans* Rüppell, 1836: 34 was treated as preoccupied by *Falco albicans* Gmelin, 1788: 276 (see below).<sup>13</sup>

*Inter alia*, Rüppell 1845: 12, Heuglin 1869b: 61, Sharpe 1874: 88, Finsch & Hartlaub 1870: 90, Blanford 1870: 291, Bocage 1877: 12, Cabanis 1882: 229, Rochebrune 1884: 38, Gurney 1884: 26, and Gurney 1894: 20 correctly referred to this taxon as *Melierax polyzonus* (Rüppell, 1836). Thus, according to article 51.3.3 of the Code (ICZN 1999) *Falco polyzonus* Rüppell, 1836, has never been a primary homonym.

Ferret & Galinier (1850: 179), though, in believing Rüppell's *polyzonus* to be congeneric with what was seen as *Nisus* (= *Accipiter*, *fide* Sharpe 1874: 130), produced a secondary homonym of *Nisus polyzonus* Lesson, 1830: 58 from Cape Province [= *Accipiter tachiro tachiro* (Daudin, 1800)] when referring to birds from Abyssinia as *Nisus polyzonus* (Rüppell, 1836), without substituting the name of Rüppell's taxon. *If in a case of secondary homonym the junior species-group name has not been replaced [...], and the relevant taxa are no longer considered congeneric, the junior name is not to be rejected, even if one species-group name was originally proposed in the current genus of the other* (ICZN 1999; article 59.2). However, prevailing usage is followed in this case. The following authors (selection) used *Melierax metabates* Heuglin, 1861b: 72, Hartlaub 1861: 100, Heuglin 1869b: 63, Reichenow 1900–01: 544, Erlanger 1904a: 163, Neumann 1904: 360, Hilgert 1908: 368, Hartert 1914: 1164, Gyldenstolpe 1924: 285, Friedmann 1930: 84, Friedmann & Loveridge 1937: 48, Archer & Godman 1937: 254, Moltoni 1943: 136, Steinbacher 1949: 104, Bannerman 1953: 300, Cave & Macdonald 1955: 107, Smithers *et al.* 1957: 42, Mackworth-Praed & Grant 1957: 211, Smith 1957: 20, Toschi 1959: 328, Mackworth-Praed & Grant 1962: 189, Balsac & Mayaud 1962: 43, Williams 1963: 49, Vaurie 1965: 170, Moreau 1966: 74, 243, Schüz 1968: 10, Wolters 1976: 83, König & Ertel 1979: 143, Weick 1980: 90, Cramp *et al.* 1980: 144, Curry-Lindahl 1981: 301, 361, Harrison 1982: 91, Brown *et al.* 1982: 368, Rosa Pinto 1983: 108, Sauer 1985: 52, Nikolaus 1987: 50, Lewis & Pomeroy 1989: 101, Tarboton 1989: 208, Serle & Morel 1990: 42, Sibley & Monroe 1990: 275, Short *et al.* 1990: 77, Morel & Morel 1990: 48, Gore 1990: 48, Thiollay 1994: 143, Williams & Arlott 1996: 47, Zimmerman *et al.* 1996: 346, Clements 2000: 39, Ferguson-Lees & Christie 2001: 510, Borrow & Demey 2001: 379, Stevenson & Fanshawe 2002: 60, and Dickinson 2003: 104.

These references meet the condition of article 23.9.1 and 23.9.2 (ICZN 1999). Herewith it is stated that the younger synonym *Melierax metabates* Heuglin, 1861b, is valid (*nomen protectum*), while the older synonym, *Falco polyzonus* Rüppell, 1836, becomes a *nomen oblitum*.

<sup>13</sup> Stresemann & Amadon (1979: 380) replaced Rüppell's name by *Aquila rapax belisarius* (Levaillant, 1850) without giving any further details.

*Falco (Aquila) albicans* Rüppell, 1836: 34(–35), pl. 13 nec *Falco albicans*

Gmelin, 1788: 276

= *Falco belisarius* Levaillant, 1850: pl. 2

= *Aquila raptor* A. E. Brehm, 1855a: 13

= *Aquila rapax albicans* Rüppell apud Hartert, 1914

= *Aquila rapax belisarius* (Levaillant, 1850)

As shown above, Rüppell (1835, 1836, 1837a, 1840) inconsistently used subgeneric names. The rules of the Code (ICZN, 1999: article 51.3.3) are followed and Rüppell's eagle species is treated within the genus given without parentheses, thus calling the taxon by the correct binomial combination *Falco albicans* Rüppell, 1836. However, Gmelin (1788: 276) had already used the name *albicans* in combination with the genus *Falco*. His *Falco albicans*, however, was based on 'Le Lanier blanc' of Brisson (1760: 367) and the 'White Lanner' of Latham (1781: 87), both copied from Aldrovandi's *Falco albus* (1599: 380, 485).<sup>14</sup> *Falco albicans* Gmelin, 1788, is now considered to refer to the white morph of Gyrfalcon *F. rusticolus*. Consequently, Rüppell's *albicans* is a younger primary homonym. Neither of the two applications of the name *Falco albicans* was recognised in synonymy by Mayr & Cottrell (1979). Whilst 19th and early-20th century authors frequently referred to *Aquila albicans* Rüppell, 1836 (e.g. Salvadori 1888: 15, Neumann 1904: 362), most mid-20th century ornithologists used *Aquila rapax raptor* A. E. Brehm, 1855a, for the same taxon (Friedmann 1930: 58, Moltoni 1937a: 76, 1937b: 220, 1939: 9, 1943: 132, Friedmann 1948: 138, Smith 1957: 19, Toschi 1959: 326, Brown 1972: 189), whilst modern ornithology knows the bird as *Aquila rapax belisarius* (Levaillant, 1850: pl. 2) (Vaurie 1965: 185, White 1965: 56, Stresemann & Amadon 1979: 380, Cramp *et al.* 1980: 216, Brown *et al.* 1982: 407, Thiollay 1994: 193, Ferguson-Lees & Christie 2001: 733, Dickinson 2003: 112). The overall pattern of the adult in Rüppell (1836: pl. 13, fig. 1) is very much like the specimen illustrated in Levaillant (1850: pl. 2), except for the quality of the colour of the wings and tail, which is grey-brown in Rüppell, but hair brown to chestnut in Levaillant. Rüppell's description gives several details of plumage pattern (wing, tail and soft-part colours) and proportions (proportion of wingtip to tail tip), which are well matched by Levaillant's illustration. However, individual variation (especially within the two major colour morphs), as well as age- and sex-related plumage variations, are frequent in this subspecies (Tarboton 1989), making subspecific determination

<sup>14</sup> Aldrovandi's (1599) p. 380 gives a list of generic characters and an introduction to the birds of prey, naming also already a *Falco albus*, but only pp. 485–486 contain the true species description. The plate on p. 487 shows a 'mythical' white bird of prey, which probably had been illustrated on tales of others, but which certainly refers to a Gyrfalcon. However, on pp. 471–472 (plate on p. 473) a description of the spotted morph of Gyrfalcon, even named *Gyrfalco*, is given as well, which is probably based on a specimen or good original drawing. The later edition of Aldrovandi (1610: 250, pl. 6) mentioned *Falco albus*, too.

problematic. A. E. Brehm (1855a: 14), for example, still listed Rüppell's taxon as a valid species beside his 'new' taxon of *Aquila raptor*. Hartert (1914: 1095) considered *albicans* different from *belisarius*, not necessarily morphologically, but in choice of habitat: the latter had been described from the Atlas Mountains, whilst the former was found in subtropical areas of north-east Africa.

***Francolinus Rüppellii* G. R. Gray, 1844:** 33 [by indication: ICZN 1999; article 12.2; misidentification]

= *Francolinus rüppelli* Finsch, 1870: 292–293: 126 [junior homonym]

= *Francolinus sharpii* Ogilvie-Grant, 1892: 47(–48)

= *Francolinus clappertoni sharpii* Ogilvie-Grant, 1892

According to Hall (1963), Rüppell would have met nominate *Francolinus Clappertoni* Children, 1826<sup>15</sup> (*locus typicus*: Bornu *fide* Ogilvie-Grant 1892) while travelling the Kordofan north of El Obeid. Later, when exploring the Dar Nuba Mountains south of El Obeid, Rüppell crossed into the contact zone of *gedgii* Ogilvie-Grant, 1891 (*locus typicus*: Plains near Mt. Elgon). On Rüppell's route from Massawa to the province of Simen and further south to Lake Tana, he had the opportunity to collect *sharpii* Ogilvie-Grant, 1892 (*locus typicus*: Bogosland, Abyssinia and Shoa: Begiuc region, see below). Rüppell's collector Martin Bretzka might also have obtained this subspecies in the province of Shoa. Slightly west of Gondar this latter subspecies intergrades with *königseggi* Madarász, 1914<sup>16</sup> (*locus typicus*: Dinder River *fide* Peters 1934). The type locality of *koenigseggi* is c.280 kilometres to the west of Gondar, and thus it is quite likely that Rüppell also met *koenigseggi*. Peters (1934) considered *koenigseggi* a synonym of *sharpii*, but this paper follows Hall (1963) in bringing *koenigseggi* out of synonymy and recognising it as a valid subspecies, distinguished by the whitish, not pale, horn margins (Smithe 1975) and the shape of the V pattern of the breast feathers (which is less pointed in *sharpii* and more pointed in *koenigseggi* than shown in Hall 1963: 118, no. 11). No material of *Francolinus c. testis* Neumann 1928 (*locus typicus*: Upper reaches of the Omo River) has been studied for this paper, but Hall (1963) put *testis*

<sup>15</sup> The Code (ICZN 1999; article 28) demands that any species-group name is always to begin with a lower case initial letter, regardless of how they were originally published. Therefore, from here on this paper refers to this taxon as *Francolinus clappertoni clappertoni* Children, 1826. Apparently J. G. Children and N. A. Vigors compiled the zoology appendix no. XXI in Denham *et al.* 1826 (E. C. Dickinson pers. comm. 2004 drew my attention to Vigors *et al.* 1827: 'The remainder [of the specimens surviving transport] have [sic] been rendered available to science by Mr Children and Mr Vigors, to whom we are indebted for the Zoological Appendix now under consideration, in which thirty-nine species of mammiferous quadrupeds, birds, and reptiles, are noticed.' [contra Peters 1934 and Dickinson 2003]). The paper still uses the citation as in Peters (1934).

<sup>16</sup> The Code (ICZN 1999; article 32.5.2.1) demands deletion of German 'Umlauts'; from now on the taxon is referred to as *Francolinus clappertoni koenigseggi* Madarász, 1914.

in synonymy of *sharpii*, Dickinson (2003) in synonymy of *nigrosquamatus* Neumann, 1902.

We do know that Rüppell indeed collected *Francolinus clappertoni clappertoni* Children, 1826, because one of Rüppell's birds of this subspecies was illustrated in Cretzschmar's atlas (1827: pl. 9). Furthermore, two of Rüppell's specimens at Frankfurt Museum (SMF 12712, SMF 23955) originate from the Kordofan and are nominate *clappertoni*, and are probably the birds Cretzschmar saw and illustrated in his work.

However, Rüppell specimen BMNH 1843.2.8.30 (ex. coll. Leadbeater) is from the population of *F. c. sharpii* Ogilvie-Grant, 1892, although certain characters are shared with *F. c. nigrosquamatus* Neumann, 1902, and *F. c. koenigseggi* Madarász, 1914. This BMNH specimen has the entire crown sepia (no. 119, Smithe 1975), leaving only the nape natal brown. Fronto-dorsal and ventral feathers have a buff (no. 124) to pale horn (no. 92) margin combined with dark sepia close to the feather shafts (best seen on the mantle and the breast). The latter feature is actually addressed in the Latin *nigrosquamatus*, meaning 'blackish scaled' (Neumann 1902), but is most apparent in *koenigseggi*. Feather shafts are the same dark colour as the web, except for the paler shafts of the wing-coverts. The Rüppell BMNH specimen differs from most specimens of *F. c. sharpii* in having laterally broad, white feather margins. Caudal dorsal feathers also lack any dark sepia. Additionally, primaries 2–3 (counted from the outside) show an inner web, which is vertically striped cinnamon-drab to pale pinkish buff (219c and 121d). These features are also known from *nigrosquamatus* (the type specimen of which does not possess this character!). Most other subspecies show a horizontal pattern along the shafts; though among *sharpii* and, rarely, *koenigseggi* both patterns or a mixture can occur. The conclusion is that the BMNH specimen of Rüppell derives from Martin Bretzka's collecting along the shores of Lake Tana, where some integration of the subspecies *Francolinus c. sharpii* Ogilvie-Grant, 1892, *Francolinus c. nigrosquamatus* Neumann, 1902, and *Francolinus c. koenigseggi* Madarász, 1914, is assumed to occur. Actually, *F. c. testis* Neumann, 1928, from the upper reaches of the Omo River, might also refer to this interbreeding population.<sup>17</sup>

Generally one can state that the subspecies complex of *sharpii*, *koenigseggi* and *nigrosquamatus* exhibits clinal variation, from pale birds along the Red Sea coast to darker birds from the montane valleys of southern Ethiopia, which is best seen in crown colour.

G. R. Gray<sup>18</sup> (1844) was the first to note differences between nominate *Francolinus clappertoni* and Rüppell's Abyssinian birds on the basis of specimen

<sup>17</sup> Two female specimens of Oscar Neumann from Lake Znaï, now at the American Museum of Natural History (AMNH 541340, 541341), show similar intermediate characters, as does a male specimen from 20 miles north of Lake Tana (alt. 7000 ft.), collected by R. E. Cheesman on 18 Oct. 1926 (AMNH 260562).

<sup>18</sup> George Robert Gray (1808–72).

BMNH 1843.2.8.30 (and a second bird, subsequently lost).<sup>19</sup> He named the new, apparently undescribed taxon *Francolinus Rüppellii* G. R. Gray, 1844: 33,<sup>20</sup> or Ruppell's Francolin, from Abyssinia. However, he failed to provide a proper species description. Instead, Gray plainly referred to Cretzschmar's plate, believing naively that all Ruppell specimens of this francolin group would have looked the same as those in front of him (indication; cf. ICZN 1999; article 12.2). But Cretzschmar (1827: pl. 9; nec 1826 *apud* Ogilvie-Grant, 1892) had studied nominate specimens from the Kordofan<sup>21</sup> before writing on the species, using for them Children's (1826) name *clappertoni*.<sup>22</sup> Gray (1844), when separating *Francolinus rueppelli* as a new species from *Francolinus clappertoni* Children, 1826, therefore erroneously referred to '*Perdix Clappertoni*, Rüpp. [sic: Cretzschmar] Atl. Zool. t. 9,' whilst in fact Cretzschmar's use of *Francolinus clappertoni* [*sensu stricto*] was correctly labelled as *Francolinus clappertoni* Children, 1826. What Gray saw was that the holotype of Children, housed in the BMNH,<sup>23</sup> differed considerably from Ruppell's specimen(s) and his valid, if mistaken, name *rueppelli*,<sup>24</sup> which is a junior synonym of *clappertoni*, was in fact based on a mixed type series consisting of Cretzschmar's plate and the BMNH Ruppell specimen(s) now being addressed by Gray (1844). The name *rueppelli* Gray, 1844, renders any younger homonym unavailable for the new taxon (ICZN 1999; article 49).<sup>25</sup>

In fact, Ruppell (1835: 11) mentioned that he had subsequently met this form of *Francolinus* in a different habitat during his second collecting trip to Abyssinia.

<sup>19</sup> Specimen BMNH 1837.6.10.701 (Vell. Cat. XXXV. 123a), occurring in the same list associated with Leiden Museum, has proved to derive from the Senckenberg Museum, as shown in a later publication of G. R. Gray (1867: 51). This second specimen, last referred to by Ogilvie-Grant (1893: 165, sp. i), must be considered subsequently lost.

<sup>20</sup> According to the Code the correct spelling of the name would be *rueppelli*, genitive of 'Ruppellius' *nec* 'Rüppellius' (ICZN 1999; article 31.1.2.) and dissolved German Umlaut 'ü' to 'ue' (ICZN 1999; article 32.5.2.1.). This paper refers to Gray's name from now on as *Francolinus rueppelli*.

<sup>21</sup> Cretzschmar (1827) reported that Ruppell had collected six specimens of the taxon during his travels in the Kordofan region.

<sup>22</sup> Cretzschmar (1827) did not quote Children as author of *Francolinus clappertoni*, but referred to the travels of Denham & Clapperton.

<sup>23</sup> G. R. Gray (1846) illustrated the type specimen of *Francolinus clappertoni clappertoni* Children, 1826.

<sup>24</sup> Hugh Clapperton (1788–1827), the collector of Children's type, had never entered the habitat of any other population of the species than that of the nominate race (Denham *et al.* 1826).

<sup>25</sup> Finsch (1870: 292–293) and Blanford (1870: 46, 425) both properly and correctly described the taxon as *Francolinus rueppelli*, each producing a junior homonym of Gray's name. The Code (ICZN 1999; article 49) prevents the usage of *rueppelli* even though it was originally wrongly applied. Murs & Prévost (1847: 147) already referred to the name *Fr. ruppellii* [sic] in a descriptive way, but did not take any decision whether to except Gray's name or not. The authors referred their specimen(s) to Ruppell (*i.e.* Cretzschmar 1827: pl. 9), as nominate *clappertoni*, although these specimen(s) almost certainly would have derived from a different subspecies. Original text as follows: *Se trouve sur les collines, mais dans des localités fort peu élevées au-dessus du plateau Rouge où elle est assez commune; mais manque*

Gray's *Francolinus rueppelli*, as shown above, derived from this second batch. Because of the mistake made by Gray (1844) the historical synonymy is extremely confused until 1893. Different authors used *Francolinus rueppelli* in various spellings alternately for *Francolinus c. clappertoni*, *F. c. sharpii* or *F. c. gedgii* (*i.a.* G. R. Gray 1846, vol. 3: *Francolinus* no. 12, Rüpell 1845: 106, Murs & Prévost 1847: 147, Bonaparte 1856: 882, Heuglin 1856: 303, Heuglin 1861a: 197, A. E. Brehm 1863: 223, Heuglin 1863: 164, Antinori 1864: 94, Hartmann 1865: 69, G. R. Gray 1867: 51, Blanford 1868: 284, Finsch 1870: 292–293, Blanford 1870: 46, 425, G. R. Gray 1870: 265, no. 9664, Heuglin 1873: 886–890, Ogilvie-Grant 1891: 126, and Hartert 1891: 194, no. 2930). Reichenbach (1848–51: pl. 201, no. 1759), sometimes quoted in connection with *Francolinus rueppelli*, merely copied Cretzschmar's plate. Many authors have been confused on the taxonomy of the group. Heuglin (1873: 886–890), for example, synonymised Cretzschmar's use of *Perdix Clappertoni* with the name *Francolinus rueppelli*, referring to Finsch, Blanford and Brehm, but not to Gray, whom he cited for what is now considered the nominate race, not appreciating that Cretzschmar had in fact a specimen from the Kordofan in front of him when describing the bird. Unsurprisingly, confusion over the different subspecies of *Francolinus clappertoni* from the Ethiopian highlands and Sudan border region reappears even today (Gajdács & Keve 1968). Some modern authors simply do not recognise any subspecies in the group (Clements 2000).<sup>26</sup>

Ogilvie-Grant (1892: 47–48),<sup>27</sup> appreciating that Cretzschmar's pl. 9 was what Children described, consequently and correctly placed *Francolinus rueppelli* in synonymy, giving the apparently still nameless taxon the new name *Francolinus sharpii* on the basis of 12 specimens,<sup>28</sup> including BMNH 1843.2.8.30.<sup>29</sup> The name *Francolinus sharpii* thus appeared in the *Catalogue of the birds in the British Museum* (Ogilvie-Grant 1893: 165) and has been in common use since (Neumann

Bornou, où elle avait été trouvée par le capitaine Clapperton, à qui il l'a dédiée. Le savant M. G. R. Gray a cru trouver une différence assez notable entre l'individu de Clapperton, décrit par Children, et celui du naturaliste allemand, pour en faire un spécification distincte. Ainsi de celui de Denham et de Clapperton il a fait *Francolinus Clappertoni* [sic], et de l'individu de M. Ruppell que nous figurons: *Fr. Ruppelli*. Comme, la seule différence que nous apercevions entre la figure donnée par M. G. R. Gray et la nôtre, reside dans une fine moustache noire à l'ouverture du bec, et que nous ne connaissons pas l'oiseau d'après lequel a été fait son dessin, nous nous sommes bornés à la dénomination de M. Ruppell, sans rien préjuger de la question, dont un des éléments de solution nous manque. Publication has been dated according to Sherborn & Woodward (1901).

<sup>26</sup> See Urban & Brown (1971: 38) for distribution and abundance of the subspecies *F. c. sharpii* and *nigrosquamatus*, and Cave & Macdonald (1955: 112–113) for the subspecies *F. c. clappertoni*, *cavei*, *gedgii*, *heuglini* and *koenigseggi*.

<sup>27</sup> William Robert Ogilvie-Grant (1863–1924).

<sup>28</sup> Warren (1966) still accounted for 12 specimens, but one apparently has gone missing since then.

<sup>29</sup> Other specimens were from the collections of William Thomas Blanford, William Jesse and Sir William Cornwallis Harris.

1904: 355, Sclater 1924: 86, Peters 1934: 79, Cheesman & Sclater 1935: 188, Moltoni 1937a: 76, Mackworth-Praed & Grant 1957: 247, Smith 1957: 20, Toschi 1959: 331, Hall 1963: 107–204, White 1965: 81, Urban & Brown 1971: 38, Wolters 1976: 105, Johnsgard 1988: 153, Howard & Moore 1991: 49, McGowan 1994: 498, Madge & McGowan 2002: 212, Dickinson 2003: 52). This paper follows in applying *Francolinus clappertoni sharpii* Ogilvie-Grant, 1892, to birds from central and northern Eritrea and northern and central Ethiopia south to the northern shores of Lake Tana.

Although the BMNH Rüppell specimen is part of the original type series of *Francolinus sharpii* Ogilvie-Grant, 1892, it shows some characters of closely related subspecies (see above).<sup>30</sup> Thus, a lectotype of *Francolinus clappertoni sharpii* Ogilvie-Grant, 1892 is designated to prevent any further confusion due to the mixed composition of the former series of syntypes. The specimen selected in Warren (1966: 269; although accidentally given the wrong registration no. BMNH 1869.10.17.394) and Ogilvie-Grant (1893: 165 sp.b) is hereby designated as:<sup>31</sup>

*Lectotype* of *Francolinus clappertoni sharpii* Ogilvie-Grant, 1892: BMNH 1869.10.16.394 [originally erroneously registered as 1869.10.17.394]. Male; loc.: [?] Bedjuk [= Begiuc region, c.15°25'N, 38°40'E; Warren (1966): Bedyuk, Finsch (1870): Bejook], Anseba-Valley, northern Ethiopia, 4200 ft.; date: 15 July 1867; leg.: William Thomas Blanford No. 1239; pres. by the Governor of India (Warren 1966; cf. Blanford 1870 for more details on the trip).

<sup>30</sup> Studied material: BMNH: 32 specimens of *Francolinus c. clappertoni* Children, 1826 (incl. holotype); 26 specimens of *F. c. sharpii* Ogilvie-Grant, 1892a (incl. lecto- and ten paralectotypes); 14 specimens of *F. c. gedgii* Ogilvie-Grant, 1891 (incl. holotype); 18 specimens of *F. c. heuglini* Neumann, 1907; two specimens of *F. c. nigrosquamatus* Neumann, 1902; two specimens of *F. c. koenigseggi* Madarász, 1914; five specimens *F. c. cavei* Macdonald, 1940 (incl. holotype). ZMB: six specimens of *F. c. sharpii*, holotype of *F. c. tschadensis* Reichenow, 1919 (see below for comments on this taxon). SMF: eight specimens of *F. c. clappertoni* (SMF 12712, 23938–23943, 23955), four specimens of *F. c. sharpii* Ogilvie-Grant, 1892a (SMF 11574–11576, 23948). AMNH: 16 specimens of *F. c. clappertoni* Children, 1826 (several of a pale rufescent brown colour; AMNH 541305 with aberrant pattern); 15 specimens of *F. c. sharpii* Ogilvie-Grant, 1892a (18 specimens of mixed characters from southern Ethiopia were not used); six specimens of *F. c. heuglini* Neumann, 1907; holotype of *F. c. nigrosquamatus* Neumann, 1902. Not studied: types of *F. c. testis* Neumann, 1928 and *F. c. heuglini* Neumann, 1907. Following specimens were consulted to establish a hybrid status of specimen BMNH 1843.2.8.30: *nigrosquamatus* BMNH 1912.10.15.1 [loc.: c.150 miles west of Lake Zwai, Caroho, Buno, southern Abyssinia]; BMNH 1912.10.15.4 [loc.: 180 miles west of Lake Zwai, Limmu, Urgessa River, southern Abyssinia]; *koenigseggi* BMNH 1915.12.24.209–212, 214 and 1901.12.4.1 [loc.: Roseires and Disa in the valley of the Blue Nile]; *sharpii* BMNH 1927.11.5.14, 1880.1.1.1145, 1912.10.15.2–3 [loc.: Gondar, Shoa and Hawash River]; outgroup *sharpii* BMNH 1889.5.13.369, 1891.5.1.10 [loc.: Bogos region along the River Anseba]; ‘*testis*’? AMNH 541340–541341 [females, loc.: Lake Zwai, southern Ethiopia,]; AMNH 260562 [male, loc.: 20 miles north of Gondar]; *nigrosquamatus* AMNH 541343 [holotype, female, loc.: Ford between Alesa/Malo and Koscha on Middle Omo River, southern Ethiopia, 21 Nov. 1901, leg. O. Neumann].

<sup>31</sup> The wording complies with the Declaration 60, *Bull. Zool. Nomen.* 2003: 263.

*Paralectotypes*: consequently, the Rüppell specimen BMNH 1843.2.8.30 (Ogilvie-Grant 1893: 165 sp. k) is only a paralectotype (with lesser taxonomic validity). Additional paralectotypes are BMNH 1889.5.13.363 (Ogilvie-Grant 1893: 165 sp. a), 1869.10.16.393 [originally 1869.10.17.393 on label] (sp. c), 1889.5.13.369 (sp. d), 1879.4.5.1609 (sp. e), 1879.4.5.1608 (sp. f), 1891.5.1.10 [originally 1891.5.1.11 on label] (sp. g), 1891.5.1.9 [originally 1891.5.1.10 on label] (sp. h), 1880.1.1.1144 (sp. l) and 1880.1.1.1145 (sp. m). The paralectotype BMNH 1837.6.10.701 (Ogilvie-Grant 1893: 165, sp. i), deriving from the collection of the Senckenberg Museum and collected by E. Rüppell in Abyssinia, was not found in 2002.

***Francolinus clappertoni tschadensis* Reichenow, 1919: 334**

= *Francolinus clappertoni clappertoni* Children, 1826 *apud* Peters 1934: 79

= *Francolinus clappertoni clappertoni* × *icterorhynchus* *fide* Neumann *quot.*

Peters 1934: 79

= *Francolinus clappertoni* ? *tschadensis* Reichenow, 1919

During my studies on North African francolins the type of *Francolinus clappertoni tschadensis* Reichenow, 1919: 334, was also consulted, revealing some inconsistencies in the literature. The holotype and unique specimen shows remarkable darker feathers all over the ventral side, not featured in any of the nominate specimens at BMNH (including the nominate's type), SMF, ZMB and AMNH. Neumann (quoted in Peters 1934) suggested a hybrid between *F. clappertoni* and *dybowskii* [*i.e.* *F. icterorhynchus* *apud* McGowan 1994].<sup>32</sup> and Hall (1963) suggested an aberrant specimen. A more cautious view appears necessary, as little collecting has taken place further north of Lake Chad, from where the specimen originates, leaving open the possibility of a separate population isolated in semi-arid dry grasslands between swamp on one side and deserts on the other (cf. also the distribution of *F. clappertoni* in Bannerman 1953). None of the BMNH specimens derives from the north and north-east shores of the lake. Furthermore, comparing the breast feather pattern, it seems unlikely that the specimen is a hybrid of the two forms suggested. The crown of Reichenow's type is halfway dark sepia becoming hair brown towards the nape. The mantle feathers have buff margins, which are consistently narrower than 2 mm (in nominate *clappertoni* often broader). Feathers on the breast and belly are margined (2–3 mm) with orange-buff (nominate *clappertoni* broadly [often wider than 3 mm] in pale buff). Towards the belly the centres of these feathers show heart-shaped dark sepia. The same feathers in the nominate form posses an elongate lanceolated wedge as pattern. The holotype, ZMB 50.133, was collected by

<sup>32</sup> McGowan (1994) submerged *dybowskii* as an example of clinal variation, thus making *F. icterorhynchus* monotypic.

Haberer<sup>33</sup> in Noëem [or Ngeem], Tschad, on 20 November 1910, and was considered by him to be a female (despite a long spur).

**‘Weisser Papagei mit rothen Flügeln’** [White parrot with red wings] Rüppell, 1838: 399

= *Psittacus levaillantii* (Kuhl)? *apud* Rüppell, 1837a: 63

= *Pionus Vaillantii*? Kuhl *apud* Rüppell, 1845: 94

= *Poicephalus [robustus]* ssp. [?]

For the sake of completeness I present some information on this dubious species, to which Michael Walters (BMNH) first drew my attention. Rüppell always based his descriptions and notes on real specimens, which he procured for all except one of the new species he described. However, this one parrot he only observed, describing it as follows (Rüppell 1838: 399): *Namentlich erwähne ich aber, als von uns hier wahrgenommen, einen Schwarm weisser Papageien mit rothen Flügeln, die wir sonst in keiner Gegend Abyssiniens wieder fanden, und deren Aufenthalt in einer so hohen Gebirgsregion merkwürdig ist. Diese Thiere—höchst wahrscheinlich der von Kuhl beschriebene Psittacus Levaillantii—schienen unsere feindlichen Absichten errathen zu haben, und ermüdeten, indem sie bald auf das eine, bald auf das andere Ufer des nur einzelne von einander weit entfernte Furthen habenden Stromes flogen, die Geduld meiner sie vergebens verfolgenden Jäger.* [Namely I mention a flock of white parrots with red wings observed by us, but not seen in any other region of Abyssinia; and its occurrence in the high mountains seemed odd. These birds—most likely *Psittacus Levaillantii* described by Kuhl—probably guessed our hostile intentions, and tired the hunters, which tried to follow them, by flying from one shore of the river, with fords far apart, to the other]. This description was reviewed by Finsch (1868: 931), who wrote: *Ein weisser Papagei mit rothen Flügeln würde für Afrika, wie überhaupt, unbedingt neu sein, denn an eine Gleichartigkeit mit Ps. Levaillantii, Kuhl (robustus, Gmelin) ist nicht zu denken.* [A white parrot with red wings would definitely be for Africa, as for any region, new, as for an equal identity to *Ps. Levaillantii*, Kuhl (*robustus*, Gmelin) is not to imagine]. However, Finsch, like Rüppell, correctly hesitated to name the bird.

Rüppell’s observation occurred on 29 June 1832 near Donkoski in the Selki Mountains (c.4,000 m) in the province of Simen. One should probably not rule out the existence of a more whitish subspecies of *Poicephalus robustus*, extending the greyish white of the head and breast onto the belly and upperwing-coverts. The red of the shoulders might have extended to the underwing-coverts as well (cf. Juniper & Parr 1998: 376–377). Rüppell never exaggerated in any of his descriptions and observations, and was always absolutely exact in his notes, so that one may assume that he did

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<sup>33</sup> Karl Albert Haberer (1864–1941)

see a small parrot, of which the identity must remain unknown. The form might have been already very rare during Rüppell's visit, and by now extinct, due to intensive hunting and the grazing of domesticated animals. Still, it seems strange that no other traveller, especially Theodor von Heuglin, met the 'white parrot with red wings.' Rüppell's (1845) reference to 'Le Vaillant Taf. 130' does not refer to Levaillant (1799, 1802, 1805, 1806, 1808), but to Kuhl's (1820) table on p. 104: no. 130.

***Buceros cristatus* Rüppell, 1835:** 3, pl. 1 *nec Buceros cristatus* Vieillot, 1816

= ? *Buceros coronatus* Rüppell MS

= *Bycanistes brevis omissus* Peters, 1945 *nomen novum*

Peters (1945), recognising the preoccupation of Rüppell's name by *Buceros cristatus* Vieillot, 1816,<sup>34</sup> created a *nomen novum* for this taxon (footnote). The lectotype (SMF 12621, collection date 1832 *fide* Steinbacher 1949) and the single paralectotype (SMF 16818, collection date 1833) of Rüppell's name are also types of the *nomen novum* of Peters. Five additional 'Rüppell' specimens are in the Frankfurt (Hartert 1891: 141, sp. 2144a), Berlin (ZMB 9673) and Leiden museums (RMNH cat. nos. 1–3). None of these latter birds can be considered as having type status, as Rüppell (1835) explicitly referred only to one collected pair. Frankfurt's lectotype, with its acquisition date of 1834, was certainly at Rüppell's disposal when writing the species account. The paralectotype even has an original field label attached stating »v. Rüppell / No. 354 / fömina / d. 15 März / 1833«. The additional specimens were obtained from the province of Shoa and were collected by Martin Bretzka in 1833–42. Rüppell wrote concerning these acquisitions in a letter to Maria Emma Gray, the wife of John Edward Gray (1800–75), on 17 February 1842 (BMNH archives: DF200/145/10): [...] there are for sale here a beautifull [sic] pair ♂ & ♀ of my *Buceros cristatus*, a species, of which up to this day there was only in Europe the single couple, I brought home from the south of Abyssinia. A servant of mine I had left in that country six [six] years ago, has just sent to me some [...] couples of these beautifull [sic] birds. [...] One pair of the *Buceros Temminck* has paid for the Leyden Museum with 126 florins or 275 francs.

***Pogonias undatus* Rüppell, 1837a:** 52, pl. 20

= *Lybius undatus undatus* (Rüppell, 1837a) & *Lybius undatus thiogaster* Neumann, 1903

Rüppell (1837a) described the juveniles of his new taxon as having the nape, neck-sides and throat black with whitish spots; the forehead, however, vivid vermillion-red like in the adult. These characters, however, refer better to adults of the sub-

<sup>34</sup> Vieillot (1816: 591): Le Calao à Casque concave, *Buceros cristatus* from Batavia [in error for Sumatra], today's *Buceros bicolor* Linnaeus, 1758.

species *L. u. thiogaster* Neumann, 1903. Any bird of this species with fully developed red on the forehead is believed to be adult (Neumann 1903). Steinbacher (1949) already designated a lectotype (SMF 12616) resembling *L. u. undatus* (Rüppell, 1837a). Paralectotypes SMF 30317–30320 and RMNH cat. no. 1 are nominate *undatus*; however, paralectotype BMNH 1837.6.10.706 is a bird with intermediate characters of *L. u. undatus* (Rüppell, 1837a) and *L. u. thiogaster* Neumann, 1903, and might be the specimen Rüppell described as ‘juvenile.’ So far, no true *L. u. thiogaster* Neumann, 1903, of Rüppell’s collection has been discovered.

*Alauda ruficeps* Rüppell, 1840: 102, pl. 38, fig. 1; nec *Alauda ruficeps* Bechstein, 1795: 120

= *Calandrella cinerea erlangeri* (Neumann, 1906)

Rüppell’s name *ruficeps* is pre-occupied by Bechstein’s ‘Feldlerche mit rothbraunem Kopfe *Alauda arvensis ruficeps*’ [Skylark with a red-brown head] (Bechstein 1795: 120, cf. Peters 1960; not mentioned in Mey 2003).

*Saxicola isabellina* Temminck, 1829a: livr. 79, pl. 472, fig. 1 [incl. females of *Oenanthe deserti deserti*]

= *Saxicola isabellina* Cretzschmar, 1830: 52, pl. 34, fig. b

= *Saxicola isabellina* Rüppell MS [in error incl. one female of *Oenanthe deserti deserti ante* 1826]

= *Saxicola olivastrus* Rüppell MS [inter 1822–30, on labels of specimens at RMNH and NMW]

= *Saxicola saltator* Ménétriés, 1832: 30<sup>35</sup>

= *Saxicola isabellina* Rüppell, 1837a: 80, 1845: 58 [incl. *Oenanthe bottae frenata* (Heuglin, 1869a)]

= *Oenanthe isabellina* (Temminck, 1829a)<sup>36</sup>

*Saxicola albogularis / albicularis* Rüppell MS [*ante* 1837]<sup>37</sup>

= *Saxicola isabellina* (Rüpp.) apud Rüppell, 1837a: 80, 1845: 58 [ex parte, incl. *Oenanthe isabellina*]

= *Saxicola frenata* Heuglin, 1869a: 158 (–159)

= *Oenanthe bottae frenata* (Heuglin, 1869a)

<sup>35</sup> The following characters, besides the general colour, mentioned by Ménétriés (1832), doubtlessly refer to *Oenanthe isabellina* (Temminck, 1829a): *la moitié supérieure de la queue est blanche, et le reste d'un noir profound* and *les deux sexes sont semblables*.

<sup>36</sup> The older name for *Oenanthe isabellina*, *Motacilla strapazina* Pallas, 1811: 447, is preoccupied by *Motacilla strapazina* Gmelin, 1788 (*fide* Seeböhm 1881).

<sup>37</sup> This MS name is quoted on old BMNH labels and in the BMNH Vellum Catalogue. The MS name well describes the throat pattern of *Oenanthe bottae frenata*.

**Saxicola deserti Temminck, 1825:** livr. 60, pl. 359, fig. 2

= *Saxicola isabellina* Rüppell MS [ex parte in error for one female of *Oenanthe deserti* *deserti ante* 1826]

= *Saxicola pallida* Rüppell MS [pro parte females of *Saxicola deserti* Temminck, 1825]<sup>38</sup>

= *Saxicola deserti* Rüppell MS [pro parte males of *Saxicola deserti* Temminck, 1825]<sup>39</sup>

= *Saxicola isabellina* Temminck, 1829a: livr. 79, pl. 472, fig. 1 [pro parte: females] nec *Saxicola isabellina* Cretzschmar, 1830: 52, pl. 34

= *Saxicola deserti* Rüpp. Temm. apud Rüppell, 1845: 58

= *Oenanthe deserti* (Temminck, 1825)

Rüppell collected *inter alia* the following three taxa of wheatears, *Oenanthe deserti* (Temminck, 1825), *Oenanthe isabellina* (Temminck, 1829a) and *Oenanthe bottae frenata* (Heuglin, 1869a). He met the latter taxon only during his second collecting trip, whilst the first two taxa were described from material taken during his first collecting trip. Rüppell already labelled all specimens with MS names in the field. He frequently sent back specimens from Africa addressed to Cretzschmar at the museum of the Senckenberg Society. During Rüppell's absence and to Rüppell's great mischief, Cretzschmar began to publish descriptions for some of the new birds. Cretzschmar forwarded other specimens to Temminck at Leiden, who first received Rüppell material in 1823 (see Temminck 1823: livr. 41: *Alauda isabellina* and *Alauda bilopha*). Between them, Cretzschmar and Temminck described 43 new bird taxa based on Rüppell's collections, before Rüppell even returned from Africa.<sup>40</sup> In so doing, they nearly always used the names proposed by Rüppell without giving Rüppell the credit for them. Both, however, always referred

<sup>38</sup> Two females of *Oenanthe deserti* (Temminck, 1825) were labelled by Rüppell as *Saxicola pallida*: SMF 52635: loc. Nubia, leg. Dr Wilhelm Peter Eduard Simon Rüppell; coll. Rüppell/Senckenberg Museum Frankfurt am Main. Label data: *Saxicola pallida* Rüpp. / ? Rüpp. Zool. Atl. Vög. t. 34 / Nubien Geschenk von Dr Rüpp. 1825 [SMF label]. SMF 52634: loc. Nubia, leg. Dr Wilhelm Peter Eduard Simon Rüppell; coll. Rüppell/Senckenberg Museum Frankfurt am Main. Label data: *Saxicola pallida* Rüppell / *Saxicola isabellina* Tem. Tem[minck's] pl[.] col. 472 / ♂ juv. / Nubien Geschenk von Dr Rüppell 1825 [SMF label].

<sup>39</sup> Male specimens of *Oenanthe deserti* (Temminck, 1825) at Frankfurt Museum were labelled with Rüppell's MS name *Saxicola deserti* (fide labels on specimens SMF 52636–37). This name was used by Temminck in the description of the taxon. One of the males is a syntype of *Saxicola deserti* Temminck, 1825: SMF 52636: male, loc. Nubia, leg. Dr Wilhelm Peter Eduard Simon Rüppell; coll. Rüppell/Senckenberg Museum Frankfurt am Main. Label data: *Saxicola deserti* Rüpp. / ♂ annotinus / Nubien Gesch. von Dr Rüpp. 1823 [SMF label]. The other male, SMF 52637: loc. Suez, leg. Dr Wilhelm Peter Eduard Simon Rüppell; coll. Rüppell/Senckenberg Museum Frankfurt am Main. Label data: *Saxicola deserti* Rüpp. / wie hornotina [added:] Winterkleid / Suez Gesch. von Dr Rüpp. 1831 [SMF label]; has no type status.

<sup>40</sup> Not all these names are valid according to modern taxonomy.

to Rüppell in the main text as the collector of the specimens. These MS names also show up in Rüppell's letters, which he sent from Africa to various colleagues.

Already in 1825 Temminck named a new wheatear *Saxicola deserti* based on a male collected by Rüppell, referring also to specimens at Frankfurt. A few years later Temminck described a further wheatear labelled by Rüppell *Saxicola isabellina*. Most of Rüppell's bird specimens labelled *Saxicola isabellina* stayed at Frankfurt. Only the smallest specimen of the series was forwarded to Temminck in Leiden by Cretzschmar. This very specimen though was in fact a female Desert Wheatear *Oenanthe deserti deserti* (Temminck, 1825). At that time (1829a) Temminck knew only the male of the species. Consequently, he described this bird, as he did with other Rüppell material, under Rüppell's MS name, in this case as *Saxicola isabellina* Temminck, 1829a: livr. 79, pl. 472, fig. 1.<sup>41</sup> Thus Temminck's description and plate of Isabelline Wheatear is actually based on a female Desert Wheatear. However, Temminck also referred to further specimens at Frankfurt Museum, making these specimens syntypes.<sup>42</sup> But the specimens at Frankfurt Museum labelled *Saxicola isabellina* Rüppell MS are in fact what modern taxonomy regards as *Oenanthe isabellina* (Temminck, 1829a). To add to the confusion, Temminck also received Rüppell specimens labelled *Saxicola olivastra*, in 1823.<sup>43</sup> Comments on the labels, which are said to be transcripts of Temminck's originals, reveal that Temminck did not work on them but kept these birds under Rüppell's MS name in his collection. Only a single specimen, RMNH 89369, was labelled by Temminck as 'S. isabellina Temm. Pl. col. 472.1 ♂ voy. Rupp. Nubie,' which is the female *Oenanthe deserti* as explained above. Cretzschmar (1830: 52, pl. 34, fig. b) followed Temminck's path and also described *Saxicola* specimens from Dongola as new for science. However, when using Rüppell's MS name *Saxicola isabellina*, Cretzschmar attributed this to the birds we still today refer to as *Oenanthe isabellina* (Temminck, 1829a). For many years *Oenanthe isabellina* was attributed to Cretzschmar, rather than to Temminck, mainly due to the incorrect belief that Cretzschmar published his description in 1826, rather than 1830. *Inter alia*, the following authors referred to *Oenanthe isabellina* Cretzschmar, 1826 [1830]: Rüppell 1845: 58 [partim], Horsfield & Moore 1854: 287, Antinori 1864: 39, Heuglin 1869a: 157–158, Seeböhm 1881: 399, and Hartert 1910: 691. Rüppell (1837a: 80)

<sup>41</sup> Temminck (1829a: livr. 79): *Les couleurs du plumage offrent peu de variété; un ton isabelle plus ou moins pur forme la teinte des parties supérieures; un brun-isabelle couvre le méat auditif; la gorge, le ventre, l'abdomen et la moitié de la queue sont blanchâtres; la poitrine et le milieu du cou d'une isabelle très-claire; les ailes, d'un brun terne, ont les couvertures lisérées de brun clair; la plus grande moitié de toutes les pennes caudales d'un brun noirâtre; le bec brun, et les pieds noirs. Longueur; cinq pouces. Du voyage de M. Ruppel en Nubie. Musées des Pays-Bas et de Francfort.* Especially the description of the tail as being more than half blackish brown clearly refers to *Oenanthe deserti*.

<sup>42</sup> Temminck might have seen these Frankfurt specimens of *Oenanthe isabellina* on his visit to Frankfurt in 1824 (Lynden-de Bruïne 2001).

<sup>43</sup> RMNH holds three specimens (RMNH 89244–46) labelled by Temminck himself as 'S. olivastra, Rupp. Nubie per Rüppell.' These are true *Oenanthe isabellina* (Temminck, 1829a).

correctly noted that Temminck's *isabellina* cannot be synonymised with Cretzschmar's *Saxicola isabellina*; but falsely synonymised it with *Saxicola pallida* Cretzschmar 1830: 51, which is a younger synonym of *Oenanthe monacha* (Temminck, 1825) (cf. Heuglin 1869a: 157, Seeböhm 1881: 383, Steinbacher 1949: 111).<sup>44</sup>

It was Sclater (1930: 455)<sup>45</sup> who first cited Temminck as the original author for *Oenanthe isabellina* sensu Cretzschmar, 1830, followed by, *inter alia*, Hartert & Steinbacher 1935: 312, Friedmann 1937: 136, Vaurie 1959: 350, White 1962: 105, Ripley 1964: 122, Wolters 1980: 422, Cramp *et al.* 1988: 756, Sibley & Monroe 1990: 542, and Dickinson 2003: 685.

As the mixed type series of *Saxicola isabellina* Temminck 1829a has caused several problems and even errors in the taxonomy of the Isabelline Wheatear I here-with designate, according to the Code (ICZN 1999, article 72.4 and 74.7.3, recommendation 74A, 74B) and after some formal discussions with the chair of the Standing Committee on Ornithological Nomenclature (Richard Schodde) and other colleagues (René Dekker, Edward Dickinson, Markus Moser), the specimen SMF 12693, illustrated in Cretzschmar 1830: 52, pl. 34, fig. b and listed as 'lectotypus' of Cretzschmar's *Saxicola isabellina* in Steinbacher (1949: 111)<sup>46</sup> and Hartert (1891: 5 sp. no. 40b) as:<sup>47</sup>

*Lectotype* of *Saxicola isabellina* Temminck, 1829a: livr. 79, pl. 472, fig. 1: SMF 12693: adult male; loc. Nubia [restricted to the province 'Dongola' in Steinbacher 1949]; northern Sudan; date: [September 1823–June 1824]; leg. Dr Wilhelm Peter Eduard Simon Rüppell; coll. Rüppell/Senckenberg Museum Frankfurt am Main, SMF acqu. 1824 (cf. Rüppell 1829, Mertens 1949 for more details concerning the trip). Label data: *Saxicola isabellina* Rüppell / ? adult / Nubien Geschenk von Dr Rüppell 1824 [SMF label].

Known *paralectotypes* of *Saxicola isabellina* Temminck, 1829a:<sup>48</sup> SMF 46186: adult female; loc. [province of Dongola], Nubia, northern Sudan; date: [February 1823–August 1823]; leg. Dr Wilhelm Peter Eduard Simon Rüppell; coll. Rüppell/Senckenberg Museum, Frankfurt am Main, SMF acqu. 1823 (cf. Hartert 1891: 111, no. 40a). Label data: *Saxicola isabellina* Rüpp[.] 1826 [error for 1830]

<sup>44</sup> Cretzschmar's (1830: 51) description of the tail of *Saxicola pallida* as turning from isabelline to reddish brown with the exception of the two central feathers, which are matt brown, unambiguously refers to females and immatures of *Oenanthe monacha*.

<sup>45</sup> A footnote in Sclater (1930) amended the publication date of Cretzschmar's *Saxicola isabellina* correctly to 1830. However, Sclater failed to recognise that Temminck's description refers to a female of *Oenanthe deserti*.

<sup>46</sup> Steinbacher's (1949: 111) lectotype designation only refers to Cretzschmar's use of *Saxicola isabellina* and has no nomenclatural relevance on the actual designation.

<sup>47</sup> The wording complies with the Declaration 60, *Bull. Zool. Nomen.* 2003: 263; Recommendation 74G is followed.

<sup>48</sup> SMF 46185, listed in Hartert (1891: 5, no. 40), has no type status for Temminck's name; it may, however, qualify as a syntype of *Saxicola saltator* Ménatriés, 1832: 30.

/ Rüpp. Atlas ♀ Vög: taf. 24 [error for 34] / Nubien per Dr Rüppell 1823 [SMF label] [=*Oenanthe isabellina* Temminck, 1829a]. NMW 59269: indet. sex; loc. [province of Dongola], Nubia, northern Sudan; date: [February 1823–July 1825]; leg. Dr Wilhelm Peter Eduard Simon Rüppell; coll. Naturhistorisches Museum Wien, acqu. no. 1826.II.10 (not in Pelzeln & Lorenz 1887: 197–198). Label data: *Saxicola valida* Licht. / (*S. olivastrum* Mus. Francof.) Vom Frankfurter Mus. in Tausch / Nubien [NMW label] [=*Oenanthe isabellina* Temminck, 1829a]. RMNH 89369: adult female; loc. Nubia, northern Sudan; date: [1823–1825]; leg. Dr Wilhelm Peter Eduard Simon Rüppell; ex.coll. Senckenberg Museum, Frankfurt am Main, coll. Nationaal Natuurhistorisch Museum, Leiden, acqu. 1824–1829 (cf. Dekker 2003: 43). Label data: *S. isabellina* Temm. pl. col. 472.1. ♂ voy. Rüpp. Nubie [=female of *Oenanthe deserti deserti* (Temminck, 1825)]. ?BMNH 1842.8.16.10: indet. sex; loc. Abyssinia [Nubia in Cretzschmar 1830], date: [not given], leg. Dr Wilhelm Peter Eduard Simon Rüppell, ex. coll. Senckenberg Museum, Frankfurt am Main, coll. The Natural History Museum, Tring, BMNH acqu. 1836 (cf. Seeböhm 1881: 401, sp. b). Label data: Abyssinia ex. Rupp. [BMNH label] [=*Oenanthe isabellina* Temminck, 1829a]. ?BMNH [no modern registration] / Vell. Cat. XV. 434a: indet. sex; loc. Abyssinia [Nubia in Cretzschmar 1830]; date: [not given]; leg. Dr Wilhelm Peter Eduard Simon Rüppell, ex. colls. John Gould, Zool. Soc. Lond. & Senckenberg Museum, Frankfurt am Main, coll. The Natural History Museum, Tring, BMNH acqu. <1837 (cf. Seeböhm 1881: 401, sp. a). Label data: loc. Abyssinia ex. coll. [not given] [BMNH skin label] [=*Oenanthe isabellina* Temminck, 1829a]. [RMNH 89244, 89245, 89246 are not part of the type series of *Saxicola isabellina* Temminck, 1829a].

Subsequently, in adding more details to Cretzschmar's description of *Oenanthe isabellina*, Rüppell (1837a: 80) included characters of both *Oenanthe bottae frenata* (Heuglin, 1869a) and *Oenanthe isabellina* (Temminck, 1829a) (cf. Heuglin 1869a: 157–158, Seeböhm 1881: 401), even though Rüppell had previously distinguished *O. b. frenata* from *O. isabellina* as *Saxicola albo-/albigularis*, an unpublished MS name (quot. BMNH registers).<sup>49,50</sup> Whilst there is considerable evidence that Rüppell indeed collected *O. b. frenata* (Heuglin, 1869a),<sup>51</sup> no name other than

<sup>49</sup> *Oenanthe bottae heuglini* (Finsch & Hartlaub, 1870), a subspecies Rüppell could also eventually have met, is much darker on its back than the *Saxicola isabellina* shown on Cretzschmar's plate, sufficiently so that Rüppell would have appreciated the difference. It may therefore be assumed that Rüppell did not collect this subspecies.

<sup>50</sup> Sibley & Monroe (1990) considered that *Oenanthe bottae* and *Oenanthe isabellina* might be conspecific.

<sup>51</sup> There are six specimens of *Oenanthe bottae frenata* (Heuglin, 1869a) at Frankfurt Museum originating from Rüppell's collecting in the province of Simen, Abyssinia, which were acquired by the museum in 1832 (SMF 46177–82). A seventh specimen, thought to be of the same provenance (Hartert 1891: 5, no. 44), is in fact from Theodor von Heuglin, and might qualify as a syntype of his name *Oenanthe bottae frenata* (SMF 46183). Two further Rüppell specimens of *O. b. frenata* are housed at BMNH (BMNH 1837.6.10.724, BMNH 1843.2.8.5).

*O. isabellina* is given for this taxon in Rüppell (1837a, 1845). On their labels Rüppell referred to these specimens as juveniles of *O. isabellina*. Therefore it is concluded that *Saxicola isabellina apud* Rüppell (1837a, 1845) must be recorded in the synonymy of both adult *O. isabellina* (Temminck, 1829a) and adult and immature *O. b. frenata* (Heuglin, 1869a: 157). Other scientists were also puzzled by these two different populations and merged the resident Abyssinian Red-breasted Wheatear with migrant Isabelline Wheatear into *O. isabellina* (Horsfield & Moore 1854: 287). Following Ripley (1964: 121–132), *O. isabellina* (Temminck, 1829a) is only a winter visitor to Nubia (i.e. Sudan), whilst *O. b. frenata* is resident in the Ethiopian highlands (cf. Heuglin 1869a: 158 recorded a breeding bird in the highlands of Simen on 28 February 1853).

***Saxicola monacha* Rüppell MS [pro parte adult males]**

- = *Saxicola monacha* 'Rupp.' Temminck, 1825: pl. 359, fig. 1 [ex parte]
- = *Saxicola monacha* (Rüpp.) *apud* Rüppell, 1837a: 79 [pro parte adult males]
- = *Oenanthe monacha* (Temminck, 1825) [ex parte adult male; and incl. *Oenanthe leucopyga leucopyga* (Chr. L. Brehm, 1855)]

***Saxicola leucura* 'Lichtenstein' Rüppell, 1837a: 79 [pro parte females, first-winter plumage], nec *Saxicola leucura* Gmelin, 1789: 820**

- = *Saxicola cachinans* [sic] (Temm.) *apud* Rüppell, 1837a: 79 [alternatively applied]
- = *Saxicola leucura* Gmelin *apud* Rüppell, 1845: 58 [pro parte females, first-winter plumage]
- = *Oenanthe leucopyga leucopyga* (C. L. Brehm, 1855)] [ex parte females, first-winter plumage]

***Saxicola pallida* Cretzschmar, 1830: 51, pl. 34, fig. a [pro parte females, first-winter plumage]**

- = *Saxicola isabellina* Temminck pl. 472, fig. 1 *apud* Rüppell, 1837a: 79 [in error]
- = *Saxicola pallida* Rüpp. *apud* Rüppell, 1845: 58 [ex parte]
- = *Oenanthe monacha* (Temminck, 1825) [ex parte females, first-winter plumage]

The BMNH 1881.5.1.935 specimen, which has been identified as *Oenanthe leucopyga leucopyga* (C. L. Brehm, 1855) in first-winter plumage, originates from the collection of Leadbeater (via John Gould), and as such is probably also from Rüppell's collecting activities in North Africa (Nubia). However, Rüppell obviously did not recognise the taxon as new and probably included this species under a different and thus composite species name in his publications. The question thus arising is in which of the 'Saxicola' species Rüppell (1837a, 1845) would have included *O. l. leucopyga* (C. L. Brehm, 1855), which was at the time of Rüppell's publications undescribed. We can assume that Rüppell certainly met this common bird during his collecting activities on the shores of the Nile around 'New' Dongola

(northern Sudan). Keith *et al.* (1992) described the bird as being 'generally abundant in suitable habitat'.

There is now much evidence that Rüppell included the juvenile, first-winter and female of *O. l. leucopyga* (C. L. Brehm, 1855) under the name 'Saxicola leucura (Lichtenstein)' and 'Saxicola cachin[n]ans (Temm.)' in his publication of 1837 (Rüppell 1837a: 79). Temminck (1820: 236–237) linked the name *Saxicola cachinnans* to Latham's (1783: 49, pl. 38) White-tailed Thrush and *Turdus leucurus*, which are the basis for the valid name of nominate *Oenanthe leucura* (Gmelin, 1789: 820), the Black Wheatear (cf. Hemprich & Ehrenberg 1833: dd). Black Wheatears occur along the Mediterranean coast of southern Europe and north-west Africa. Only very rarely have vagrants of the subspecies *syenitica* been recorded in northern Egypt (Heuglin 1869a: 155–156). Lichtenstein's (1823: 32) 'Saxicola leucura n.–*Turdus leucur.* Lin. Gm.–*Saxic. cachinnans* Temm.' from Egyptian Nubia, described as 'S. atra, cauda (Basi) alba Longot. 7", tarsi 14''' is difficult to identify on the basis of its description (it could be either *O. l. leucopyga* [C. L. Brehm, 1855] or *O. l. syenitica* [Heuglin, 1869a]), but has been synonymised with *O. l. leucopyga* (C. L. Brehm, 1855) on the basis of its distribution and the identity of the type material collected by Hemprich and Ehrenberg (thus Lichtenstein's name is a junior homonym; cf. Seebold 1881: 374). Hartert (1891: 5) listed two of Rüppell's specimens from Egypt as *O. leucura*, but mentioned characters that are not specific. In subsequently again publishing on *O. leucura*, Hartert (1910: 698–699) did not cite Egypt within its range.

Males of the African subspecies *O. l. syenitica* (Heuglin, 1869a) are not only very similar to first-winters and females, but are especially similar to juvenile *O. l. leucopyga* (C. L. Brehm, 1855). An exception is the colour of the head in females and immature males, which is black in *Oenanthe leucopyga*, but dark umber in *Oenanthe leucura*. Juveniles<sup>52</sup> of *O. leucopyga* are distinguished from *O. leucura* by the dark umber-brown to blackish belly, which is pale hair brown in *O. leucura* (cf. juveniles ZMB 4854, ZMB 70.246). No specimen of *O. leucura syenitica* (Heuglin, 1869a) from Rüppell's collection has been traced, so it is assumed that Rüppell never collected this taxon.

Furthermore, Rüppell included adult males of *O. l. leucopyga* (C. L. Brehm, 1855) alongside adult males of *O. monacha* (Temminck, 1825) under 'Saxicola monacha, (Rüpp.)' in his publication of 1837 (Rüppell 1837a: 79). Already in the field Rüppell applied the MS name 'Saxicola monacha' to both adult males of *O. l. leucopyga* (C. L. Brehm, 1855) and males of *O. monacha* (Temminck, 1825). Adult males of *O. monacha* differ from male *O. leucopyga* in having a white, not black belly (but both have prominent white undertail-coverts and vent). Loche (1867) was

<sup>52</sup> Juveniles of *Oenanthe leucopyga leucopyga* (Brehm, 1855) are identified as such in having pale feather tips on the head (and rarely the back). Tail feathers of immatures and juveniles are often smudged with a large brown spot near the tip, similar to *Oenanthe leucura*.

first to draw attention to the fact that Rüppell mixed *O. leucopyga* with *O. monacha* (Temminck, 1825).<sup>53</sup>

Females and first-winters of *Oenanthe monacha*, which were described by Cretzschmar (1830: 51, pl. 34, fig. a) as *Saxicola pallida* (cf. Hartert 1910: 701), were still erroneously referred to ‘*Saxicola pallida* (Rüpp.)’ in Rüppell (1837a). Additionally Rüppell believed that Temminck’s (1829a) description of female *Oenanthe deserti deserti* (Temminck, 1825) as *Saxicola isabellina* (see above) would also be *Saxicola pallida*.

*O. monacha* (Temminck, 1825) and *O. l. leucopyga* (C. L. Brehm, 1855) occur sympatrically in the Nile Delta. The main breeding habitat of *O. monacha*, though, is east of the Nile to the west shore of the Red Sea, whilst *O. leucopyga* replaces *O. monacha* from the Sudanese border south. *O. deserti* is a winter migrant to north-east Africa from Asia (cf. Ripley 1964, Keith *et al.* 1992).

In summary, Rüppell’s use of *Saxicola monacha* must be synonymised with males of *O. l. leucopyga* (C. L. Brehm, 1855) and *O. monacha* (Temminck, 1825), whereas Rüppell’s *Saxicola leucura* with females and first-winters of *O. l. leucopyga* (C. L. Brehm, 1855). *Saxicola pallida apud* Rüppell (1837a, 1845) are the first-winter and female of *O. monacha* (Temminck, 1825), although once also confused with females of *O. deserti* (Rüppell 1837a: reference to Temminck 1829a).

#### List of synonymy for Rüppell’s (1845) genus *Saxicola*<sup>54</sup>

*Saxicola leucura*, Gmelin, *apud* Rüppell, 1845 = *Oenanthe leucopyga leucopyga* (C. L. Brehm, 1855: 225): females, first-winters and juveniles.

*Saxicola monacha*, Rüpp. Temm., *apud* Rüppell, 1845 = *Oenanthe leucopyga leucopyga* (C. L. Brehm, 1855: 225): adult male, and *Oenanthe monacha* (Temminck, 1825: pl. 359, fig. 1): adult male.

*Saxicola lugubris*, Rüpp., *apud* Rüppell, 1845 = *Oenanthe lugens lugubris* (Rüppell, 1837a: 77, pl. 28, fig. 1): immature, female and male.

*Saxicola melaena*, Rüpp., *apud* Rüppell, 1845 = *Saxicola melas* Rüppell, 1837a: pl. 28, fig. 2 = *Myrmecocichla melaena* (Rüppell, 1837a: 77): adult and immature (Keith *et al.* 1992: no immature known [in error]).

*Saxicola albifrons*, Rüpp., *apud* Rüppell, 1845 = *Myrmecocichla albifrons albifrons* (Rüppell, 1837a: 78; Rüppell, 1845: pl. 17): adult / immature (Rüppell 1837a: females [in error]).

<sup>53</sup> Loche (1867), though, wrongly cited Rüppell’s plate 34 (i.e. Cretzschmar 1830, pl. 34, fig. a), which would demonstrate that females of *Oenanthe monacha* had been re-described under the name *pallida*, but would not underline Loche’s case that *O. monacha* in Rüppell (1837) includes *O. leucopyga*.

<sup>54</sup> Names and citations follow Ripley (1964). Names and their synonyms from Rüppell (1837a) are added in all cases where these differ from Rüppell (1845).

*Saxicola lugens*, Lichtenstein, *apud* Rüppell, 1845 = *Oenanthe lugens lugens* (Lichtenstein, 1823: 33): adult male (perhaps also females and other subspecies included).

*Saxicola albofasciata*, Rüpp., *apud* Rüppell, 1845 = *Saxicola torquatus albofasciatus* Rüppell, 1840: 115; Rüppell, 1845: 39, pl. 16: first-year male (cf. David & Gosselin 2002b: 263).

*Saxicola melanura*, Rüpp. Temm., *apud* Rüppell, 1845 = *Cercomela melanura lypura* (Hemprich & Ehrenberg, 1833: 'ee'): adult and (?) *Cercomela melanura melanura* (Temminck, 1824a: pl. 257): adult.

*Saxicola isabellina*, Rüpp., *apud* Rüppell, 1845 = *Oenanthe isabellina* (Temminck, 1829a: livr. 79, pl. 472, fig. 1): adult, and *Oenanthe bottae frenata* (Heuglin, 1869a: 157): adult, immature and (?) juvenile.

*Saxicola pallida*, (Rüpp.), *apud* Rüppell, 1837a = *Oenanthe deserti deserti* (Temminck, 1825: pl. 359, fig. 2): female, and *Oenanthe monacha* (Temminck, 1825: pl. 359, fig. 1): female and immature.

*Saxicola pallida*, Rüpp., *apud* Rüppell, 1845 = *Oenanthe monacha* (Temminck, 1825: pl. 359, fig. 1): female and immature.

*Saxicola oenanthe*, Bechstein, Buffon *apud* Rüppell, 1845 = *Oenanthe oenanthe oenanthe* (Linnaeus, 1758: 186): non-breeding plumage.<sup>55</sup>

*Saxicola aurita*, (Temminck) *apud* Rüppell, 1837a = *Oenanthe hispanica melanoleuca* (Güldenstädt, 1775: 468; cf. Seeböhm 1881): non-breeding plumage.

*Saxicola stapazina*, Gmel. et *aurita* Temm. *apud* Rüppell, 1845 = *Oenanthe hispanica melanoleuca* (Güldenstädt, 1775: 468, quot. Seeböhm 1881): non-breeding plumage. [Rüppell also refers to Temminck 1824b: plate 281 (in error: i.e. 257) fig. 1, which is the adult male].

*Saxicola deserti*, Rüpp. Temm., *apud* Rüppell, 1845 = *Oenanthe deserti deserti* (Temminck, 1825: pl. 359, fig. 2): non-breeding plumage.

*Saxicola rubicola*, Bechstein, Buffon *apud* Rüppell, 1845 = *Saxicola torquatus rubicolus* (Linnaeus, 1766: 332): non-breeding plumage (cf. David & Gosselin 2002b: 263).<sup>56</sup>

*Saxicola rubetra*, Bechstein, Buffon *apud* Rüppell, 1845 = *Saxicola rubetra* (Linnaeus, 1758: 186): non-breeding plumage.<sup>57</sup>

*Saxicola rufocinerea*, Rüpp., *apud* Rüppell, 1845 = *Monticola rufocinereus rufocinereus* (Rüppell, 1837a: 76, pl. 27, figs. 1 & 2): adult male and female, immature.

*Saxicola ? sordida*, Rüpp., *apud* Rüppell, 1845 = *Cercomela sordida sordida* (Rüppell, 1837a: 75, pl. 26, fig. 2): adult.

<sup>55</sup> Rüppell (1845) erroneously quoted 'Bechstein, Buffon Taf. 554 Fig. 1 und 2'. However, Bechstein (1800–02) translated only the parts on the amphibians and reptiles, whilst the work containing pl. 554 is by Otto (1790: opposite p. 4), being a translation of Buffon (1778: 237–247).

<sup>56</sup> Rüppell (1845) referred to pl. 678, fig. 1 in Otto (1789: opposite p. 238), *nec* Bechstein (1800–02).

<sup>57</sup> Rüppell (1845) referred to pl. 678, fig. 2 in Otto (1789: opposite p. 238), *nec* Bechstein (1800–02).

**Saxicola albiscapulata**, (Rüpp.) *apud* Rüppell, 1837a = *Thamnobia*? (Swainson) *albiscapulata*, Rüpp. *apud* Rüppell, 1845 = *Saxicola rufiventris* Rüppell MS (cf. Salvadori 1914: 10) = *Thamnolaea cinnamomeiventris albiscapulata* (Rüppell, 1837a: 74(–75), pl. 26, fig. 1.): adult male and female, immature.

**Saxicola semirufa**, (Rüpp.) *apud* Rüppell, 1837a = *Thamnobia?* *semirufa*, Rüpp. *apud* Rüppell, 1845 = *Thamnolaea semirufa* (Rüppell, 1837a: 74, pl. 25, fig. 1 & 2): adult male and female, immature.

**Saxicola cyanea**, (Gmel.) Buffon, *apud* Rüppell, 1837a = *Monticola solitarius solitarius* (Linnaeus, 1758) or *Monticola solitarius longirostris* (Blyth, 1847).

**Saxicola saxatilis**, (Latham) Buffon, *apud* Rüppell, 1837a = *Monticola saxatilis* (Linnaeus, 1766).

**Malurus inquietus** Cretzschmar, 1830: 55, pl. 36, fig. b

= *Curruca Famula* Hemprich & Ehrenberg, 1833: ‘bb’

= *Scotocerca inquieta inquieta* (Cretzschmar, 1830)

Although the publication date of Cretzschmar’s *Malurus inquietus* was given as 1827 in most recent checklists (cf. Watson *et al.* 1986: 126, Dickinson 2003: 556), the issue containing the name was published in 1830. Sharpe (1883: 213) listed *Curruca famula* Hemprich & Ehrenberg, 1828, as the assumed older synonym, but the year 1828 is also incorrect. *Curruca famula* Hemprich & Ehrenberg had been published on page ‘bb’ in the year 1833, after Cretzschmar’s 1830 description.

**Malurus clamans** Cretzschmar, 1826: 2 (–3), pl. 2, fig. a

= *Malurus clamans* Temminck, 1828: livr. 78, pl. 466, fig. 2

= *Spiloptila clamans* (Cretzschmar, 1826)

Watson *et al.* (1985: 154), followed *inter alia* by Dickinson (2003: 560), regarded Temminck as the first author of this species, although Temminck (1828) wrote in connection of the name *clamans*, reflecting the bird’s strong voice, that its name had already been ‘*imposé par M. Ruppel [sic.]*’. In fact, it was Cretzschmar in 1826, who first named the taxon based on a MS name of Rüppell: *Das hellönende Rufen, mit welchem dieser kleine Vogel seine Anwesenheit zu erkennen giebt [sic], hat Rüppell zu der ihm ertheilten [sic] Benennung veranlasst* [The high-pitched call, with which the tiny bird indicates its presence, triggered Rüppell’s naming of the species] (Cretzschmar 1826: 3). This statement of Cretzschmar may also count as evidence that Rüppell dispatched probably all specimens with MS names attached. Rüppell was, at the time Cretzschmar’s description was published, still in Africa.

**Cinnyris proteus** Rüppell, 1840: 91, footnote 1 [*nomen oblitum*: referred to ICZN]

= *Nectarinia cruentata* Rüppell, 1845: 26(–27), pl. 9 [*nomen protectum*: referred to ICZN]

= *Nectarinia senegalensis cruentata* Rüppell, 1845

Rüppell named the same taxon twice, in 1840 and in 1845. Rüppell (1840) proposed by indication a new species name *proteus* for the taxon, associating it with an illustration (pl. 295, fig. 2) and a bibliographic reference (pp. 117–118) in Levaillant's (1808, nec 1800) *Histoire Naturelle des Oiseaux d'Afrique* (ICZN 1999; article 12.2.1 and 12.2.7: indication). All birds in Levaillant's work lacked scientific binomials. Even though Rüppell (1840) believed his specimens to be similar, he nevertheless also provided his own description of his specimens (first footnote, p. 91). Additionally, Rüppell made reference to Levaillant's name *Le Sucrier Protte* [nec *Proté*], though latinised by Rüppell as *Cinnyris proteus*, a valid given name under the rules of the ICZN (1999). To further the confusion, Levaillant's bird, now considered a different subspecies to Rüppell's bird, had already been named by Linnaeus (1766: 186) as *Certhia senegalensis*. Rüppell's second description, from 1845, contains passages already given in 1840, clearly indicating that it is indeed the same taxon. Bonaparte (1850) was the first to synonymise *Cinnyris proteus* with *Nectarinia cruentata*, not however acknowledging priority, as it was before any international agreement on zoological nomenclature had taken place.

To my knowledge no one has ever used the senior synonym *Cinnyris proteus* Rüppell, 1840, which would pre-date the commonly used *Nectarinia cruentata* Rüppell, 1845, except in synonymy (cf. *i.a.* Rüppell 1845: 26, Murs & Prévost 1847: 87, Ferret & Galinier 1850: 248, Bonaparte 1850: 406, A. E. Brehm 1863: 211, Heuglin 1864: 262, Blanford 1868: 284, Heuglin 1869b: 228, Finsch 1870: 229, Blanford 1870: 352, Salvadori 1873: 450, Shelley 1878: 259, Gadow 1884: 93, Salvadori 1884: 125, Hartert 1891: 30, Shelley 1900: 100, Reichenow 1904–05: 462, Neumann 1906: 252, Hilgert 1908: 146, Salvadori 1914: 11, Moltoni 1937b: 250, Moltoni 1939: 36, Steinbacher 1949: 116, Cave & Macdonald 1955: 353, Smith 1957: 328, Toschi 1959: 399, Mackworth-Praed & Grant 1960: 795, Rand 1967: 234, Wolters 1979: 278, Nikolaus 1987: 250, Lewis & Pomeroy 1989: 495, Howard & Moore 1991: 425, Clements 2000: 547, Fry *et al.* 2000: 194, Cheke & Mann 2001: 236, Dickinson 2003: 707), meeting the condition of article 23.9.1.1 (ICZN 1999). However, although the condition given in article 23.9.1.2 (ICZN 1999) is assumed to be met, it has not been proved. The Zoological Records of 1954–2003 do not list any publication that cites the particular subspecies of Scarlet-chested Sunbird. Only general checklists, Ethiopian / North Kenyan avifaunae and the monograph of Cheke & Mann (2001) offer such detail.

Therefore, this case has been referred to the Commission (2 July 2004; Steinheimer in press: case 3330) for a ruling under the plenary power (ICZN 1999; article 23.9.3). While the case is under consideration, the junior synonym *Nectarinia cruentata* Rüppell, 1845, is to be maintained.

If the *nomen protectum* is accepted, then it is unnecessary to designate a lectotype for *Cinnyris proteus* Rüppell, 1840, a name which is based on a mixed type series consisting of Levaillant's (1808) plate of *N. senegalensis senegalensis* (Linnaeus, 1766) and specimens of *N. senegalensis cruentata* Rüppell, 1845.

***Serinus citrinelloides* Rüppell, 1840: 95, pl. 34, fig. 1**

= *Fringilla chrysola* Rüppell MS [incl. *Serinus canicollis flavivertex* (Blanford, 1869: 330)]

= *Serinus citrinelloides citrinelloides* Rüppell, 1840 [incl. *Serinus canicollis flavivertex* (Blanford, 1869: 330)]

The original description, and thus the syntypical series of *Serinus citrinelloides* Rüppell, 1840 includes two different taxa: a ‘male’ bird (juvenile male or female *fide* Neumann 1905) of *Serinus citrinelloides citrinelloides* Rüppell, 1840 (SMF 12653) and two females of *S. canicollis flavivertex* (Blanford, 1869) (SMF 66175, BMNH 1837.6.10.727). Even Hartert (1891: 58, no. 861a and 56, no. 843) referred to the female (SMF 66175) under the incorrect species. Neumann (1905: 354–355) first drew attention to this, but his comments have been ignored and have not affected the nomenclature. Independent of Neumann the same conclusion has been reached while working on BMNH Rüppell material. To prevent any further confusion of the taxonomy of Rüppell’s type series, and according to Recommendations 74A to 74F and article 74 (ICZN 1999) the specimen SMF 12653 listed as no. 861 in Hartert (1891: 58) and as the ‘Typus’ in Steinbacher (1949: 118) is hereby designated as:<sup>58</sup>

*Lectotype* of *Serinus citrinelloides* Rüppell, 1840: 95: SMF 12653, juv. male or female, loc. Abyssinien [province Simen] (*fide* Rüppell 1840), date: [1832] (*fide* Steinbacher 1949), leg. Dr Wilhelm Peter Eduard Simon Rüppell, coll. Rüppell/Senckenberg Museum Frankfurt am Main.

Known *paralectotypes*: BMNH [?] 1837.6.10.727, female, loc. Abyssinia, date: [not given], leg. Dr Wilhelm Peter Eduard Simon Rüppell, coll. BMNH, ex. coll. Rüppell/Senckenberg Museum Frankfurt am Main, BMNH acqu. 1834 [=female of *Serinus canicollis flavivertex* (Blanford, 1869)]; SMF 66175, female, loc. Abyssinien, date: [not given], leg. Dr Wilhelm Peter Eduard Simon Rüppell, coll. Rüppell/Senckenberg Museum Frankfurt am Main [=female of *Serinus canicollis flavivertex* (Blanford, 1869)].

***Plocepasser melanorhynchus* Rüppell, 1845: 74**

= *Plocepasser melanorhynchus* Bonaparte, 1850: 444

= *Plocepasser mahali melanorhynchus* Rüppell, 1845

Slater (1930: 717) regarded Rüppell’s name as a *nomen nudum*, believing that the name was only subsequently made available by Bonaparte’s (1850: 444) use of *Plocepasser melanorhynchus*, when he described the taxon briefly as *Simillimus praecedenti* [*i.e.* *Plocepasser mahali*], *sed minor et rectricibus minus marginatis*.

<sup>58</sup> The wording complies with the Declaration 60, *Bull. Zool. Nomen.* 2003: 263; Recommendation 74G is followed.

According to Sclater (1930), Rüppell (1845: 78) had apparently named this taxon only within a tabular overview. Rüppell's name was considered to be a *nomen nudum*. Since then, Bonaparte has commonly been referred to as first author of *Plocepasser melanorhynchus* (*i.a.* Benson 1947: 29, Mackworth-Praed & Grant 1960: 863, Moreau & Greenway 1962: 5, and Dickinson 2003: 715).

However, Rüppell gave a detailed description and binominal name to the taxon nowadays assigned to Bonaparte's authorship, and Rüppell's original description, overlooked by these subsequent authors, is found on p. 74 (Rüppell 1845): *Ein dem von Dr. A. Smith in Südafrika entdeckten Plocepasser Mahali ungemein ähnlicher Vogel fand sich in der mir gemachten Sendung von Schoa vor. Der ganze Unterschied beschränkt sich darauf, dass bei jenem der etwas mehr robuste Schnabel verwaschen braunroth, bei demjenigen aus Schoa aber schwarz ist; dass ferner bei jenem der Bauch schmutzig isabell, bei diesem rein weiss ist; bei jenem die dunkelbraunen Steuerfedern nicht allein am Ende, sondern auch seitlich weiss gesäumt sind, während der nordafrikanische Vogel nur das Ende der Steuerfedern weiss gerandet hat. Vielleicht ist das Ganze nur climatische Varietät, die ich provisorisch mit dem Namen Plocepasser melanorhynchus zu bezeichnen vorschlage* [A bird, which is very similar to *Plocepasser Mahali* discovered by Dr A. Smith in South Africa, has been found in a consignment addressed to me from Shoa. The entire difference is limited to a black beak of the specimen from Shoa, whereas the former [*i.e.* Smith's] bird has a stronger, but washed brownish-red bill; the former bird has also a 'dirty isabelline', the latter a pure white belly; the former has its dark brown tail-feathers also laterally margined white, whereas the North African bird has white margins only at the tail tip. Perhaps the whole [phenomena] is just a 'climate variety', which I suggest to be provisionally named *Plocepasser melanorhynchus*].

A few pages later, as seen above, Rüppell (1845: 78) referred to his newly introduced name in a tabular list as well. Several subsequent authors accepted Rüppell's authorship for this new taxon (*i.a.* Gray 1849: Ord. II, Tribe IV, *Textor*, Bonaparte 1850: 444, Sharpe 1890: 246, Neumann 1905: 336, Steinbacher 1949: 117). As Sclater (1930) did not explicitly give reasons for treating Rüppell's name as *nomen nudum* (cf. ICZN 1999: 111 *nomen nudum*) Rüppell's name is valid and therefore this taxon should be cited as *Plocepasser mahali melanorhynchus* Rüppell, 1845: 74, even though Rüppell originally might have established the name provisionally only for a variety (cf. ICZN 1999 article 11.5.1 & 45.6.4). Article 23.9.1.1. (ICZN 1999) prevents treatment of Bonaparte's homonym as a *nomen protectum* because Rüppell's authorship of this taxon was cited as part of a valid name several times in the 20th century (e.g. Neumann 1905: 336, Steinbacher 1949: 117). One lectotype and one paralectotype of this taxon are at the Senckenberg Museum, Frankfurt (Hartert 1891: 67, Steinbacher 1949: 117), whilst the paralectotype formerly housed at the BMNH has not been traced.

*Ploceus larvatus* Rüppell, 1840: 91, pl. 32, fig. 1

= *Ploceus melanocephalus* Rüppell MS

= *Ploceus flavoviridis* Rüppell, 1845: 69 (–70), pl. 29: *pro parte* females

= *Ploceus cucullatus abyssinicus* (Gmelin, 1789)

Rüppell described females of his own taxon, *Ploceus larvatus* Rüppell, 1840, under a new name *Ploceus flavoviridis* Rüppell, 1845 (pp. 69–70, cf. Steinbacher 1949).

*Ploceus erythrocephalus* Rüppell, 1845: 71, nec *Ploceus erythrocephalus*

Swainson, 1838: 308

= *Ploceus melanotis* Lafresnaye, 1839: 20,<sup>59</sup> nec *Ploceus melanotis* Swainson, 1837: 307

= *Ploceus leuconotus* Müller, 1851: 28

= *Malimbus rubriceps leuconotus* (Müller, 1851) *apud* Moreau & Greenway 1962: 60

= *Anaplectes melanotis melanotis* (Lafresnaye, 1840 [*sic!*]) *apud* Dickinson 2003

= *Malimbus rubriceps leuconotus* (Müller, 1851)

According to ICBN (1999) article 23.3.5 a junior homonym, in this case *Ploceus melanotis* Lafresnaye, 1839, being preoccupied by *Ploceus melanotis* Swainson, 1837, may be replaced by the next oldest available name from among its synonyms. However, the next oldest name, *Ploceus erythrocephalus* Rüppell, 1845, is ‘itself invalid’ (junior homonym of *Ploceus erythrocephalus* Swainson, 1838) so that Moreau & Greenway (1962) correctly used *Ploceus leuconotus* of Müller, 1851 for *Malimbus rubriceps leuconotus* (Müller, 1851) (cf. ICBN 1999 article 60). Dickinson (2003) used the primary homonym *melanotis* and thereby transgressed the Code (ICBN 1999 article 52 and 53.3).

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<sup>59</sup> Lafresnaye published the account *Oiseau inédit du genre Tisserin* on pp. 20–21 in the Jan. 1839 issue of *Rev. Zool. Soc. Cuvierienne Année* 1839: 1–32. Moreau & Greenway 1962: 60, followed by Dickinson 2003: 724, cited the year of publication as 1840, as given on the title page of the entire volume.

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<sup>60</sup> I follow Sherborn & Woodward (1901) for the dating of vol. 6 of this work.

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## APPENDIX

Tabular, alphabetic overview of Rüppell's and Cretzschmar's bird names which are considered valid in modern nomenclature (taxonomy of Peters *et al.* 1934–87; nomenclature altered accordingly to Steinbacher 1949, Sawyer 1952, David & Gosselin 2002a,b, and to the present paper [changes to Peters *et al.* 1934–1987 in bold]).

- Accipiter badius sphenurus* (Rüppell, 1836)
- Accipiter rufiventris perspicillaris* (Rüppell, 1836)
- Accipiter tachiro unduliventer* (Rüppell, 1836)
- Alcippe abyssinica abyssinica* (Rüppell, 1840)<sup>61</sup>
- Alectoris melanocephala* (Rüppell, 1835)
- Anas sparsa leucostigma* Rüppell, 1845
- Anthus novaeseelandiae cinnamomeus* Rüppell, 1840<sup>62</sup>
- Apalis rufifrons rufifrons* (Rüppell, 1840)<sup>63</sup>
- Aploelia larvata bronzina* (Rüppell, 1837)<sup>64</sup>
- Ardea goliath* Cretzschmar, 1829
- Bostrychia carunculata* (Rüppell, 1837)<sup>65</sup>
- Bradypterus cinnamomeus cinnamomeus* (Rüppell, 1840)
- Burhinus capensis affinis* (Rüppell, 1837)<sup>66</sup>
- Buteo rufinus rufinus* (Cretzschmar, 1829)
- Buteo (rufofuscus) augur* (Rüppell, 1836)
- Camaroptera brevicaudata brevicaudata* (Cretzschmar, 1830)<sup>67</sup>
- Caprimulgus poliocephalus poliocephalus* Rüppell, 1840<sup>68</sup>
- Caprimulgus tristigma tristigma* Rüppell, 1840
- Cecropis daurica melanocrissus* Rüppell, 1845<sup>69</sup>
- Centropus monachus monachus* Rüppell, 1837
- Cercomela sordida sordida* (Rüppell, 1837)

<sup>61</sup> Dickinson (2003: 602) used the genus *Pseudoalcippe* for this African taxon.

<sup>62</sup> Dickinson (2003: 742) separated the African pipits under Rüppell's *cinnamomeus* from the *novaeseelandiae* species group.

<sup>63</sup> Dickinson (2003: 562) used the genus *Urorhipis* for this taxon. Rüppell (1840: 110) erroneously referred to pl. 41, fig. 2 instead of fig. 1.

<sup>64</sup> Dickinson (2003: 160) treated this taxon under the genus *Columba*.

<sup>65</sup> Rüppell (1837a: 49) erroneously referred to pl. 13 instead of 19.

<sup>66</sup> Dickinson (2003: 131) synonymised the subspecies *affinis* with *B. capensis maculosus* (Temminck, 1824).

<sup>67</sup> Dickinson (2003: 562) placed this subspecies in the species *C. brachyura*.

<sup>68</sup> Dickinson (2003: 243) treated *poliocephalus* as monotypic.

<sup>69</sup> See David & Gosselin (2002a: 34) for the spelling of *melanocrissus*.

- Cisticola galactotes lugubris* (Rüppell, 1840)  
*Cisticola robustus robustus* (Rüppell, 1845)<sup>70</sup>  
*Cisticola ruficeps ruficeps* (Cretzschmar, 1830)  
*Colius striatus leucotis* Rüppell, 1839  
*Columba albitorques* Rüppell, 1837  
*Coracina melanoptera melanoptera* (Rüppell, 1839)  
*Corvus crassirostris* Rüppell, 1836  
*Cossypha semirufa semirufa* (Rüppell, 1840)  
*Crinifer africanus zonurus* (Rüppell, 1835)<sup>71</sup>  
*Crinifer leucogaster* (Rüppell, 1842)<sup>72</sup>  
*Crinifer personatus personatus* (Rüppell, 1842)<sup>73</sup>  
*Cyanochen cyanoptera* (Rüppell, 1845)<sup>74</sup>  
*Dinemella dinemelli dinemelli* (Rüppell, 1845)  
*Emberiza caesia* Cretzschmar, 1827  
*Emberiza flaviventris flavigastra* Cretzschmar, 1828<sup>75</sup>  
*Emberiza tahapisi septemstriata* Rüppell, 1837<sup>76</sup>  
*Erythropygia leucophrys leucoptera* (Rüppell, 1845)<sup>77</sup>  
*Euplectes capensis xanthomelas* Rüppell, 1840  
*Francolinus africanus gutturalis* (Rüppell, 1835)<sup>78</sup>  
*Francolinus erckelii erckelii* (Rüppell, 1835)<sup>79</sup>  
*Glareola pratincola limbata* Rüppell, 1845<sup>80</sup>  
*Indicator minor diadematus* Rüppell, 1837  
*Jynx ruficollis aequatorialis* Rüppell, 1842  
*Lagonosticta larvata larvata* (Rüppell, 1840)  
*Lamprotornis purpuroptera purpuroptera* Rüppell, 1845<sup>81</sup>  
*Laniarius barbarus erythrogaster* (Cretzschmar, 1829)<sup>82</sup>  
*Lissotis melanogaster melanogaster* (Rüppell, 1835)<sup>83</sup>  
*Lybius undatus undatus* (Rüppell, 1837)  
*Macronyx flavicollis* Rüppell, 1840  
*Melaenornis chocolatinus chocolatinus* (Rüppell, 1840)  
*Melaenornis semipartitus semipartitus* (Rüppell, 1840)<sup>84</sup>

<sup>70</sup> See Dickinson (2003: 551) for treating *Cisticola* as a masculine noun.

<sup>71</sup> Dickinson (2003: 207) treated this taxon as monotypic.

<sup>72</sup> Dickinson (2003: 207) placed this species in the genus *Corythaixoides*.

<sup>73</sup> According to Dickinson (2003: 207) the gender of the genus *Crinifer* is masculine; Dickinson, however, placed this species in the genus *Corythaixoides*.

<sup>74</sup> According to David & Gosselin (2002b) the gender of the genus *Cyanochen* is female.

<sup>75</sup> Dickinson (2003: 779) erroneously used the male gender for this taxon; the genus *Emberiza* is female.

<sup>76</sup> The species name *septemstriata* was first published on pl. 30, fig. 2, in 1837. The text appeared subsequently in 1840 (cf. Sawyer 1952).

<sup>77</sup> Dickinson (2003: 679) lumped *Erythropygia* with *Cercotrichas*.

<sup>78</sup> Dickinson (2003: 51) placed the subspecies *gutturalis* in the species group of *F. levallantoides*.

<sup>79</sup> Dickinson (2003: 53) treated this taxon as monotypic.

<sup>80</sup> Dickinson (2003: 146) synonymised this subspecies with nominate *G. pratincola*.

<sup>81</sup> See David & Gosselin (2002a: 39) for the spelling of *purpuroptera*.

<sup>82</sup> Dickinson (2003: 460) upgraded *erythrogaster* to a monotypic species.

<sup>83</sup> Pl. 7, illustrating ‘*Otis melanogaster mas.* (Rüppell)’ was published subsequently to the text in 1836.

<sup>84</sup> Dickinson (2003: 690) placed this taxon in its own genus *Empidornis*.

- Monticola rufocinereus rufocinereus* (Rüppell, 1837)  
*Myrmecocichla albifrons albifrons* (Rüppell, 1837)  
*Myrmecocichla melaena* (Rüppell, 1837)<sup>85</sup>  
*Nectarinia senegalensis cruentata* Rüppell, 1845<sup>86</sup>  
*Neotis ludwigii* (Rüppell, 1837)  
*Neotis nuba* (Cretzschmar, 1826)  
*Oenanthe lugens lugubris* (Rüppell, 1837)<sup>87</sup>  
*Onychognathus albirostris* (Rüppell, 1836)  
*Onychognathus tenuirostris tenuirostris* (Rüppell, 1836)  
*Parisoma lugens lugens* (Rüppell, 1840)<sup>88</sup>  
*Parus leucomelas leucomelas* Rüppell, 1840  
*Passer griseus swainsonii* (Rüppell, 1840)  
*Phyllolais pulchella* (Cretzschmar, 1830)  
*Phylloscopus umbrovirens umbrovirens* (Rüppell, 1840)  
*Plocepasser mahali melanorhynchos* **Rüppell, 1845**  
*Plocepasser superciliosus* (Cretzschmar, 1827)  
*Ploceus galbula* Rüppell, 1840  
*Ploceus intermedius intermedius* Rüppell, 1845  
*Ploceus rubiginosus rubiginosus* Rüppell, 1840  
*Poicephalus flavifrons flavifrons* (Rüppell, 1842)<sup>89</sup>  
*Poicephalus meyeri meyeri* (Cretzschmar, 1827)  
*Poicephalus rufiventris rufiventris* (Rüppell, 1842)<sup>90</sup>  
*Prionops plumatus cristatus* Rüppell, 1836<sup>91</sup>  
*Psalidoprocne pristoptera pristoptera* (Rüppell, 1840)<sup>92</sup>  
*Pteropodocys maxima maxima* (Rüppell, 1839)<sup>93</sup>  
*Rhinopomastus minor minor* (Rüppell, 1845)  
*Saxicola torquatus albofasciatus* Rüppell, 1840<sup>94</sup>  
*Scotocerca inquieta inquieta* (Cretzschmar, 1830)  
*Serinus atrocularis xanthopygius* Rüppell, 1840  
*Serinus citrinelloides citrinelloides* Rüppell, 1840  
*Serinus nigriceps* Rüppell, 1840  
*Serinus striolatus striolatus* (Rüppell, 1840)<sup>95</sup>

<sup>85</sup> On pl. 28, fig. 2 (Rüppell 1837a) as *Saxicola melas*, synonym of *Myrmecocichla melaena* (Rüppell, 1837: 77).

<sup>86</sup> Dickinson (2003: 707) placed this taxon in the genus *Chalcomitra*.

<sup>87</sup> Dickinson (2003: 685) separated this taxon from *O. lugens*.

<sup>88</sup> The year of publication is given in Watson *et al.* (1986: 267) as 1804, a typographic error for 1840.

<sup>89</sup> The original description of *Pionus flavifrons* Rüppell, 1842a, was published on p. 126 in *Mus. Senckenbergianum* 3(2); later copied in Rüppell (1845: 81–82). Dickinson (2003: 195) treated the species as monotypic.

<sup>90</sup> The original description of *Pionus rufiventris* Rüppell, 1842a, was published on p. 125 in *Mus. Senckenbergianum* 3(2); later copied in Rüppell (1845: 83).

<sup>91</sup> See David & Gosselin (2002b) for the male gender of the genus *Prionops*.

<sup>92</sup> Steinbacher (1949: 114) gave the wrong date: p. 105 and pl. 39 were published in 1840.

<sup>93</sup> Dickinson (2003: 465) placed *Pteropodocys* in the genus *Coracina*.

<sup>94</sup> The original description of *Saxicola torquatus albofasciatus* Rüppell, 1840, was published on p. 115, in *Neue Wirbelthiere zu der Fauna von Abyssinien gehöhrig*; Rüppell (1845: 39, pl. 16) repeated the description. See David & Gosselin (2002b: 263) for the spelling of the taxon.

<sup>95</sup> The type genus was *Pyrrhula* (not *Serinus* as in Dickinson 2003: 748).

- Serinus tristriatus* Rüppell, 1840  
*Spiloptila clamans* (Cretzschmar, 1826)  
*Spreo pulcher rufiventris* (Rüppell, 1836)<sup>96</sup>  
*Spreo superbus* (Rüppell, 1845)<sup>97</sup>  
*Stephanibyx melanopterus melanopterus* (Cretzschmar, 1829)<sup>98</sup>  
*Streptopelia lugens lugens* (Rüppell, 1837)<sup>99</sup>  
*Streptopelia semitorquata semitorquata* (Rüppell, 1837)<sup>100</sup>  
*Sylvia hortensis crassirostris* Cretzschmar, 1830  
*Tauraco leucotis leucotis* (Rüppell, 1835)  
*Thalasseus bergii velox* (Cretzschmar, 1827)<sup>101</sup>  
*Thamnolaea cinnamomeiventris albiscapulata* (Rüppell, 1837)  
*Thamnolaea semirufa* (Rüppell, 1837)  
*Thripias namaquus schoensis* (Rüppell, 1842)<sup>102</sup>  
*Tockus flavirostris flavirostris* (Rüppell, 1835)<sup>103</sup>  
*Trachyphonus margaritatus margaritatus* (Cretzschmar, 1828)  
*Tricholaema melanocephala melanocephala* (Cretzschmar, 1829)<sup>104</sup>  
*Turdoides leucopygia leucopygia* (Rüppell, 1837)<sup>105</sup>  
*Turdoides leucopygia limbata* (Rüppell, 1845)  
*Turdoides plebejus leucocephala* Cretzschmar, 1826<sup>106</sup>  
*Turdoides plebejus plebejus* (Cretzschmar, 1828)  
*Turdoides rubiginosa rubiginosa* (Rüppell, 1845)  
*Turdoides squamiceps squamiceps* (Cretzschmar, 1827)  
*Turdus litsipsirupa simensis* (Rüppell, 1837)<sup>107</sup>  
*Tylibyx melanocephalus* (Rüppell, 1845)<sup>108</sup>

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<sup>96</sup> Dickinson (2003: 657) indicated that *rufiventris* is a synonym of *Lamprotornis (Spreo) pulcher*. Rüppell (1836: 27, pl. 11, fig. 1) gave an alternative name, *Lamprotornis chrysogaster abyssinica* Rüppell, 1836, which is a synonym of *Spreo pulcher rufiventris* (Rüppell, 1836).

<sup>97</sup> Dickinson (2003: 657) placed this taxon in the genus *Lamprotornis*.

<sup>98</sup> In Dickinson (2003: 133) as *Vanellus m. melanopterus*.

<sup>99</sup> Dickinson (2003: 160) treated the species as monotypic.

<sup>100</sup> Dickinson (2003: 161) treated the species as monotypic.

<sup>101</sup> In Dickinson (2003: 150) as *Sterna bergii velox*.

<sup>102</sup> The Code (ICZN 1999, article 27) explicitly states that no diacritic marks are to be used in scientific names, thus the original *schoënsis* must become *schoensis*. Dickinson (2003: 317) placed the species in the genus *Dendropicos*.

<sup>103</sup> In Dickinson (2003: 298) this taxon is monotypic.

<sup>104</sup> The gender of the genus *Tricholaema* is female according to David & Gosselin (2002b).

<sup>105</sup> The gender of the genus *Turdoides* is female according to David & Gosselin (2002b). The species was originally described as *Ixos leucopygius* on pl. 30, fig. 1, in 1837. The text appeared subsequently in 1840 (cf. Sawyer 1952).

<sup>106</sup> Dickinson (2003: 611) upgraded *T. leucocephala* to species level.

<sup>107</sup> The species name *simensis* was first published on pl. 29, fig. 1, in 1837. The text appeared subsequently in 1840 (cf. Sawyer 1952). Dickinson (2003: 666) referred to this taxon as *Psophocichla litsipsirupa simensis*.

<sup>108</sup> In Dickinson (2003: 134) as *Vanellus melanocephalus*.